Clinical Lecture
ON
TUMOURS OF THE SCROTUM,

Delivered at University College Hospital,

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GENTLEMEN,—I propose to-day to speak of tumours of the scrotum. It is a very important subject, one which is constantly coming before us here at the hospital, and I need hardly add that tumours of the scrotum pretty frequently come before candidates for examination.

Let me say at once that, having seen a good deal of the examination by candidates of tumours of the scrotum, it seems to me that a great many of them do not know how to go to work. There is a right and a wrong way of examining a case, and the wrong way is to seize hold of the tumour and put the patient to pain. Naturally the patient does not like it and resents it, and I presume that if he were a private patient he would transfer his attentions elsewhere; he would not put up with it for a moment. The first thing you have to ascertain is whether the tumour is really scrotal, or whether it is abdominal and has come down into the scrotum; of course, that is a matter of vital importance. If it is a scrotal tumour, it is a comparatively simple matter; if it is a tumour which has come down from the abdomen into the scrotum, it may be a very urgent matter, especially if a hernia. This is most conveniently ascertained by sitting down in front of your patient and employing your right hand if the scrotal swelling is on the left side, and *vice versâ*. What you want to do is to feel with the fingers and thumb whether you can make out the spermatic cord above the swelling, or whether there is something obscuring it. If you can feel the spermatic cord, and nothing else with it, it is clear that the tumour must be entirely scrotal, and cannot have come down from above. If, on the other hand, you feel the swelling going right up into the groin, the probability is that it has come down from above. I say the probability, because it is not quite certain even then, for every now and then hydroceles do protrude up from the scrotum, and sometimes even invade the inguinal region; but that is the exception rather than the rule.

These abdomino-scrotal cases may be at once conveniently divided into reducible and irreducible by laying the patient down and applying gentle pressure. A reducible tumour is, of course, *primâ facie* a *hernia*. When reducible with a little manipulation, it will go up, if it is intestine, with that characteristic "slip and gurgle" which we all recognise as leading symptoms of hernia. But you must bear in mind that you will have the sac left alongside the cord, and that commonly you have the sac considerably thickened in old-standing cases. Again, a hernia may be composed entirely of omentum, and the omentum, although it may be pushed back, will go up in a very different way from the slip of the intestine. It requires manipulation really to push it back, and the knotty feel of the omentum is so entirely different from the feel of intestine that you ought, with a little experience, such as you may get in ordinary student life, to be able to distinguish the two. Then, let me say, an omental hernia is very commonly irreducible. It often happens that a piece of omentum has come down and has been so for months or even years, and has got certain attachments to the sac, and the result is that you cannot put it back; it is practically an irreducible hernia. Of course occasionally intestine is irreducible—not so commonly, I think, in the inguinal as in the femoral region. Still it may be irreducible, and then you would recognise it, of course, not by the slip and gurgle that I have mentioned, but by the general sensation conveyed to your hand, by the feel that it is intestine containing more or less gas, and by the very important symptom that when you percuss over it carefully with your fingers in the ordinary way you elicit a clear note.

Now let us take the other so-called reducible tumours. I should put second *congenital hydrocele*—a form of hydrocele, as you all ought to know, in which the tunica vaginalis still communicates with the abdominal cavity. It is seldom seen except in children, but every now and then seen later on in life. In a child you get a tumour which you recognise at once as a hydrocele, but it has the peculiarity that, when you lay the child down and hold the scrotum up, the fluid disappears, or, if you have the patient standing, with a little manipulation you can still squeeze the fluid into the abdomen. The way in which that congenital hydrocele returns into the abdomen is quite different from the return of a hernia: there is nothing of the characteristic slip and gurgle, but it is simply a flow of the fluid by gravity into the peritoneal cavity when you hold the scrotum up. It is very important, of course, to recognise this in a child, because if you make the serious mistake of tapping it without recognising it, it is conceivable that you might be led to inject iodine, and find that you had injected the peritoneal cavity and set up peritonitis.

Then the third form of reducible tumour is *hydrocele of the cord*, which is not strictly reducible, although it appears to be so in some cases. I refer to a little sac shut off from the funicular process of the peritoneum and not absorbed completely, but still containing some fluid. It forms a little tumour, which slips up and down alongside the cord with a little gentle manipulation. If you take hold of the cord and pull it down, you generally pull the tumour down with it, and when you let go perhaps the tumour disappears; still with a little manipulation you can get it down, and then it eludes your finger and slips up again. But there it is always of the same size; it does not vary in the least. The only interest in connexion with it is that it is often mistaken for hernia. I have had children brought to me over and over again, even the children of medical men more than once, who were supposed to have hernia. A little care in examination shows that it is not a hernia—that it is simply a tumour containing fluid, and very elastic. You can frequently cure those cases at once by a simple puncture, drawing off a small quantity of straw-coloured albuminous serum.

Lastly, I may mention *varicocele*, because it is reducible to a certain extent, and no doubt is often misunderstood, because a large varicocele has a very distinct impulse on coughing. It is a curious thing, but it is only of late years that we have been able to get an impulse on coughing put down and recognised in the books as one of the symptoms of varicocele, although I presume it has existed from time immemorial. Thus, having an impulse on coughing when you make the patient stand up, the varicocele becomes, of course, distended with blood (varicocele, I need hardly say, is a bundle of distended spermatic veins); you can reduce the distension by a little pressure, and in that sense it is reducible; not reducible like hernia, nor exactly like hydrocele of the cord, because you can squeeze the fluid out of the veins, and when you take off the pressure the fluid comes down again without any straining if the patient is erect. One of the best tests for varicocele is this. You lay the patient down, and squeeze the fluid blood out of the veins; you put the finger firmly on the abdominal ring, and then you let the patient stand up, still keeping the finger on the ring. Of course, if it were anything from above, either a hernia or a hydrocele of the cord, the effect of your putting your finger there would be to prevent its filling, but you will find as the patient stands up that in two or three minutes the veins fill, of course from below, and there is the varicocele below the finger as full of blood as ever.

We have discussed, then, the four reducible tumours of the scrotum—hernia, congenital hydrocele, hydrocele of the cord, and varicocele; and we now come to the true scrotal tumours. When you have a tumour which is distinctly scrotal, the first thing you have to ascertain is whether it is or is not a *hydrocele*, a hydrocele being of course a common affection. We have here a patient who tells me that he was last tapped five months ago, and I see by his paper that he has been tapped five times, and I presume that the sac is now pretty well filled again. It is, as you see, a fairly well marked ordinary hydrocele. I will proceed to examine it according to my own teaching. First, we have to ascertain whether the cord is quite clear. Here it is perfectly clear, and below it there is a very elastic tumour, large enough in this case to give signs of fluctuation. Let me warn you, however, against always

expecting to get fluctuation in a case of hydrocele. It must be large in the first place, and it must not be too tense in the second, or you will not get fluctuation. But when you have a hydrocele, however small it may be, you will always get the feeling of elasticity which is so characteristic. This is a large hydrocele, and, as you see, I can manipulate it, and almost show you at a distance that there is fluctuation. Then let me call your attention to the fact that it conceals the testicle. You can see nothing of the testicle at all. There is the healthy testicle on the opposite side, but here the testicle is entirely concealed; if you remember the anatomy of the parts, you will know that the testicle is entirely at the back. I have before now heard men say, "It cannot be a hydrocele, because I can't feel the testicle." Now I should have said that that was the very reason why it was a hydrocele, because the testicle could not be felt. I quite allow that if you know where to look for the testicle, if you feel at the back of the tumour, you can generally get some indication of its presence. I can feel this man's testicle now, and I have no doubt that if I pinched it he would not like it; but if you had a hydrocele a good deal larger than this, the testicle might be so completely overlapped by it that you would not feel it at all.

We have here, then, a very elastic pyriform swelling, which is characteristic of a hydrocele. In order to be sure about it, let me apply the last test—that of translucency. It is here that a great mistake is often made, and I want to show you the proper way of examining a scrotum for translucency. You let the patient stand, and you sit down in front of him. You then have a light held on the side where the hydrocele is. If you put the light on the opposite side, of course there are the other testicle and the penis both in your way; but if you have the light held on this side, you will have it at once close to the hydrocele, and you will have very little difficulty in getting translucency, provided you make the scrotum tense. That is the mistake that is made by a great many persons—the parts are held so unskilfully that the scrotum is not tense, and if you have it loose it stands to reason that you do not get the light transmitted readily through it. If you have any difficulty in the matter, you can easily get over it by using a roll of paper or a stethoscope to look through, and you at once recognise the pink glare caused by the transmitted light.

I will now tap the swelling in order to demonstrate that it is a case of hydrocele, though I have no doubt about it myself. I begin by making it tense; then I plunge in the trocar and cannula, and at once get the straw-coloured fluid, which I will demonstrate to you contains albumen in large quantity by the addition of a little nitric acid.

Now, supposing that we had a tumour of the scrotum resembling to all intents and purposes that swelling which I have demonstrated to be a common hydrocele, it might yet not be a common hydrocele after all. If you get an encysted hydrocele growing to a large size, I do not think anybody can be quite sure before tapping whether it is an ordinary hydrocele or not. If it is a *small* encysted hydrocele, you may be quite sure, for you find a small elastic swelling connected with the epididymis, which is the usual position of it, and you tap it with a trocar and canula and draw off the fluid. I have not the opportunity of showing you a case of that kind, but the fluid is quite different from ordinary hydrocele fluid. It is either perfectly clear water or it is a sort of opalescent fluid, looking very like poor milk-and-water, and it is really the fluid of a cyst developed in connexion with the epididymis and generally containing spermatozoa.

So much for hydrocele. Now for the other tumours of the scrotum. We have in the ward at this moment an old man who has had *hæmatocele* following upon a hydrocele. A hæmatocele is a collection of blood in the tunica vaginalis, which may arise in more than one way. It may be an acute hæmatocele resulting from injury. A man has received some blow, a kick on the scrotum, and almost immediately he finds a swelling. This is partly due, no doubt, to blood effused under the skin, an ordinary bruise, but in many cases you also find a distinct collection of blood in the tunica vaginalis. A recent hæmatocele is much more globular in shape than a hydrocele, as you might expect, for a hydrocele is a very slow affair, and, as it forms, it distends the tunica vaginalis and gives the characteristic pyriform shape. But if you take an ordinary healthy tunica vaginalis and suddenly distend it, of course it is more or less globular, and so a recent hæmatocele is globular rather than pyriform. In the patient to whom I refer the hæmatocele was distinctly pyriform for this reason: he had a hydrocele first, which had been tapped on more than one occasion, and on the last occasion, for some reason or other, I cannot tell why, it filled with blood. Now people are sometimes uncharitable enough to say that because a hydrocele has been converted into a hæmatocele the surgeon must have made some blunder—perhaps pricked the testicle. I can assure you that it does not at all necessarily follow. I am not responsible for this case, because another surgeon operated; but I have had the same thing occur to myself, and I am sure that I did not prick the testicle. Moreover, I must confess that I have pricked the testicle perhaps on more than one occasion, and to my knowledge hæmatocele has not been produced. The rational explanation of the occurrence of a hæmatocele no doubt is this, that you have got an old patient who has had hydrocele for years, and who has been tapped several times. The veins of the tunica vaginalis and the scrotum are all more or less distended and varicose, and when you suddenly withdraw a good many ounces of fluid which have been supporting these veins one of them gives way.

However it may be produced, the symptoms of a hæmatocele are of course very characteristic. In the first place, it does not feel so elastic as a hydrocele. It feels more doughy, because, if you think of it for a moment, there is a large quantity of clot in the sac. Then it feels heavier, because a clot of blood in the sac gives rise to a sense of weight; it is heavier to the surgeon's hand, and the patient says it feels heavier than it did before, when it was an ordinary hydrocele. Then, of course, it is not translucent; you cannot make it translucent by any means you can adopt, because no light can find its way through a clot of blood. You may tap a hæmatocele if you like, and draw off the fluid portion of the blood, but, if there is a large clot left behind, the only way is to lay the sac open and turn it out, and let the wound granulate from the bottom.

Presuming that we have no fluid in the scrotal swelling at all, but that it is solid, it must of course be some form of tumour of the testicle. You may, however, have a fluid tumour combined with a solid tumour, and that is what we call *hydro-sarcocele*. The hydrocele must be tapped, and the fluid drawn off before you can thoroughly examine what the sarcocele behind is, and it is well always after you have tapped a hydrocele to examine the testicle and see if it is healthy or not.

Now let us take the solid growths which you have in the scrotum, and first of the acute inflammation of the testicle, which you may meet with either as the result of injury or of disease. A man gets an injury to the testicle, followed, it may be, by acute orchitis; but a much more common event is that he has had gonorrhœa, and that the inflammation spreads along the vas deferens to the testicle, and then he gets acute orchitis. But there is a difference between the two forms. In the case of injury, the body of the testicle is first enlarged and inflamed, and the epididymis is often comparatively healthy. In the case of gonorrhœal disease it is really epididymitis; the inflammation travels first to the epididymis, and when that has become inflamed it spreads more or less to the body of the testicle, and if you see the case early the body of the testicle may perhaps be comparatively healthy. In both cases, let the cause be what it may, you will have much the same symptoms as regards the extreme painfulness of the testis and the redness of the scrotum. The redness of the scrotum is almost pathognomonic of an inflamed testicle, unless the patient has got extravasation of urine, for those are really the two things producing redness of the scrotum. An inflamed testicle is exceedingly tender, and you can almost tell a patient with orchitis, when he walks into your room, by the way in which he straddles his legs and the careful manner in which he sits down on the corner of a chair. In the case of the gonorrhœal testicle, you of course feel the cord, and you find the vas deferens considerably enlarged. But remember that, as a rule, you will not find the gonorrhœal discharge. When the testicle becomes inflamed, the gonorrhœal discharge ceases, for a time at all events; and one of the symptoms of the testicle getting better is that the gonorrhœa is reproduced.

Then, to go on to more chronic forms of orchitis, when you see a testicle with a history of having been enlarged for some months, it is very important to make out what the cause of the disease is. Of course, you may have a syphilitic testicle, or you may have a

tubercular testicle, or you may have a testicle which is enlarged simply from irritation in the urethra. It is very important not to make a mistake in diagnosis, and not to jump at once to a conclusion that all cases of enlargement of the epididymis are tubercular. I notice a tendency in the present day to put everything down to tubercle. Well, tubercle has a good deal to be responsible for, no doubt; still it is a mistake to suppose that every enlarged epididymis is due to tubercle when the patient has perhaps a stricture which will sufficiently account for it. The first thing is to examine the testicle carefully and see which part is enlarged. If the body of the testicle is healthy and the epididymis alone is enlarged, then it becomes a question whether it is tubercular epididymitis, beginning in the epididymis and spreading from that to the body of the testicle, and also perhaps up the cord; or whether it is a case of epididymitis depending upon irritation of the urethra, in which the inflammation has travelled down the cord the whole length of the enlarged vas deferens. A careful examination of the cord will soon settle that question. You can put a few questions to the patient as to whether he has had gonorrhœa or gleet, whether he makes a good stream of water, and so on. It is not a bad plan, if you have any doubt about it, to examine the urethra; you will do no harm; and if you find there is a stricture you had better treat that first, and then hope that the testicle will clear up. The importance of the diagnosis is this, that if it is a tubercular case mercury will do the patient a great deal of harm; and if, on the other hand, it is a case of chronic inflammation due to irritation, mercury will do a great deal of good. There are cases, I quite allow, where you are obliged sometimes to give mercury tentatively in order to see whether the case will or will not improve under its influence. Where the history is obscure you may not be quite sure which you have to deal with, and it is better in such a case to give mercury for a time and watch it, and then see whether the patient improves or not. On the other hand, supposing we have a testicle enlarged and particularly hard, with very little mischief about the epididymis and none in the cord, and especially if you have a small hydrocele as well, what is the probable diagnosis in that case? In all probability it is syphilitic—late secondary syphilis. You find the patient has had syphilis; he has been treated for it, and thinks himself perfectly well. Latterly, however, he finds his testicle has become enlarged, and here is the result. Those are syphilitic cases which can be rapidly cured by small doses of mercury, not by iodide of potassium alone. There is another form of syphilitic testicle which you sometimes get—a gumma of the testicle. That is a much later disease, which you get in patients whose health has entirely broken down. They have a gummatous deposit in the testicle as in the tongue or other organs, which tends to break through the skin, and these cases are best treated with iodide of potassium.

Then to go back for one moment to the tubercular testicle. No doubt, if you could persuade people to submit to what was the best thing for them, in many cases it would be best to castrate them. You have a nucleus of a tubercle, say, in the epididymis of one testicle, and if you could get it out of the man's system it would be the best thing for him. But in the case of a young man of twenty-five, who has simply one small nodule on his testicle, neither he nor his friends would for a moment hear of castration, and you would have to fall back upon other methods, and fortunately in those early cases other methods answer very well. The best thing for a patient of that kind is to send him for a long sea voyage. It is astonishing what a long sea voyage will do in these cases. The nodule disappears, and the patient comes back perfectly well, and often remains in good health. If you get a case that is more advanced than that, I quite agree that, if it is tending to produce an abscess, the sooner the patient loses the testicle the better; because you can assure him that one testicle is quite as good as two for all practical purposes, and he had better get rid of that nucleus of mischief before it spreads up the vas deferens. For in later days we find not only the vas deferens enlarged, but the vesiculæ seminales affected. The patient has great irritability about the bladder, and if you put your finger into the rectum you find the vesiculæ seminales and prostate enlarged and thickened, and even abscesses in them. Those cases where you have tubercular mischief about the neck of the bladder are very painful ones, and very little can be done to relieve the patient from suffering infinite torture. Improve, then, the patient's health in the case of a tubercular testicle as far as you can by cod-liver oil, syrup of iodide of iron, and a sea voyage beyond all. Failing an improvement in that way, remove the testicle before it involves the surrounding parts, and particularly before anything like *fungus testis* is formed. We still occasionally see cases of fungus testis. Do not confuse fungus testis with malignant fungus; the benign fungus is simply the result of an abscess in the testicle, the protrusion of a granulating mass, partly composed of granulation tissue and partly of tubuli semeniferi. You may cut it away and possibly bring the skin over it, as recommended by the late Professor Syme, but the best thing is to castrate the patient.

One word with regard to the other diseases of the testicle which come into the question of the diagnosis of scrotal tumours. We have various forms of tumour of the testicle, malignant or semi-malignant, all of which are characterised by rapidity of growth. There is a remarkable form of sarcoma which is occasionally found in the testicle—chondro-sarcoma of the testicle. It is an exceedingly hard form, but contains true sarcomatous elements; and it is an exceedingly dangerous form for the patient, because almost invariably there are secondary deposits. True cancer which is found in the testicle is of the medullary form. The history of it is usually one of great rapidity, beginning in the body of the testicle involving the skin very rapidly over it, then bursting through the skin and forming a malignant fungus if it is allowed to go on. In these cases the only thing to do is to remove the testicle as early as possible before the cord is affected, and, if possible, through a healthy portion of cord, following the cord up some little distance, so that you may get to the really healthy part.

A SECOND SERIES OF CASES OF ABDOMINAL SECTION, INCLUDING ELEVEN COMPLETED OVARIOTOMIES.

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ABOUT twelve months ago I published[1] a statement of all my cases of abdominal section up to the end of 1886. In the present paper the record is completed up to the time I left Manchester. This supplementary series consists of twenty cases, extending over a period of fifteen months. As before, the ovariotomies are placed in a separate table. They are eleven in number. Although in two of these the disease proved to be sarcomatous, and recurred some months later, so far as the operation was concerned they all made a good recovery. Up to March, 1888, therefore, my record shows a consecutive series of thirty-one successful cases. Comparatively speaking, this number is of course a small one. But when it is remembered that it means four and a half years' continuous work without a death, and that the cases were taken as they came, without any selection, it will be seen that, small as the number is, it is not without significance, especially in reference to the value of antiseptic treatment[2] in abdominal surgery.

The cases in the table do not call for lengthy comment. In the first case (No. 46) it will be observed that the second ovary was also slightly enlarged and cystic, but was not removed, owing to its being embedded in a dense mass of deep-seated adhesions. The result so far has justified this course. No operator willingly leaves diseased structures unremoved, but sometimes I feel sure it is the wiser course.

[1] THE LANCET, July 30th and Aug. 6th, 1887.

[2] It is well to remember that antiseptic treatment includes much more than the mere employment of certain germicide solutions. This is but one small part of it, and perhaps not even the most essential part. It is incorrect to describe a method of treatment as antiseptic simply because these agents are used, and it is equally incorrect to refuse to admit that a certain method of treatment is antiseptic merely because the use of these agents forms no part of it. The latter mode of treatment may, in reality, better deserve to be called antiseptic than the former. Much of the disputation which is still going on as to the value of the antiseptic method in abdominal surgery arises from the want of a clear understanding as to what does and what does not constitute antiseptic treatment. Properly speaking, antiseptic treatment includes every precaution adopted to prevent sepsis, and the more of such precautions an operator takes the more thoroughly antiseptic is his method.

The attempt to separate the adhesions in this case would have added greatly to the risk of the operation, and there would, in my opinion, have been no proportionate gain. The patient is at present fairly comfortable; if the diseased ovary should give trouble hereafter, it will be time enough then to consider the propriety of attempting its removal.

Nos. 48 and 50 were the two cases of malignant disease to which allusion has been already made. No. 48 was the wife of a tramp. The abdomen was very large, the disease had grown very rapidly, and the emaciation was extreme. The operation was undertaken with little hope of success, and even when the main tumours were removed it was feared the patient would die from the shock. She rallied, however, and made a rapid recovery, and I have no doubt her life was prolonged several months by the operation.

No. 50 presents several points of interest. A tumour of the left ovary was removed by abdominal section two years previously (Feb. 4th, 1885). The right ovary at that time appeared healthy. On Oct. 13th, 1886, suprapubic cystotomy was performed for the removal of a large vesical calculus. Shortly afterwards the abdomen began to enlarge for the second time, and in May, 1887, a cystic tumour of the right ovary was removed. Thus within a little more than two years the patient had three severe abdominal operations, from each of which she recovered with marvellous rapidity, the temperature on no occasion reaching 100°. The ovarian tumours presented no appearance that excited suspicion of malignancy; but the development a few months after the last operation of a number of hard, painful tumours in the front of the chest and elsewhere left little doubt as to the disease being sarcoma.

In only three out of the eleven cases was the second ovary normal; in four cases it formed a tumour of sufficient size to necessitate removal; in three cases, being only slightly enlarged, it was left undisturbed; and in one case it had been already removed.

In the case of six of the patients menstruation came on prematurely as a result of the operation, commencing in four cases on the second day, and in two cases on the third. The discharge in each case lasted three or four days. Of the five patients in whose cases there is no record of such an occurrence, two were fifty or upwards and had ceased to menstruate—one four years previously, the other sixteen.

For the first week the temperature was, in every case, carefully recorded every four hours, night and day. In only two cases did it at any time exceed 101°; and in one of these

COMPLETED OVARIOTOMIES.

SERIES III., JANUARY, 1887, TO MARCH, 1888 (TREATED ANTISEPTICALLY, BUT WITHOUT SPRAY).

No.	Name.	Age.	Civil condition.	Date of operation.	Nature and weight of tumour.	Adhesions.	Drainage, glass tube.	Condition and treatment of other ovary.	Result.	Remarks.
46	E. A. B.	31	M.	1887. Feb. 23	Cystic adenoma of left ovary, size of cocoanut; removed without puncture; weight, 1 lb. 5 oz.	None.	None	Cystic, small, forming centre of mass of firm adhesions involving all the parts right of uterus. Not removed.	R.	Temperature 10 P.M. on day of operation, 100·2°; after which it never reached 100°.
47	M. A. B	35	M.	April 20	Multilocular cyst of left ovary, not very large; contents thick, chocolate-coloured; weight, 5 lb. 8 oz.	Parietal, omental, intestinal.	24 hrs.	Normal.	R.	Attack of peritonitis eight weeks before operation; some pain for first few days; no sickness after first 24 hours; temperature elevated for a week, once reaching 103° (10 P.M. April 22nd). Discharged well May 22nd.
48	E. L.	50	M.	May 6	Cysto-sarcoma of both ovaries, with ascites; right tumour very large, chiefly solid; weight, 16 lb. 9 oz.; weight of left, 6 lb. 6 oz.	Omental.	24 hrs.	See under "Nature of Tumour."	R.	Patient much emaciated; girth at umbilicus 38½ in.; peritoneum studded with small solid masses; most abundant in Douglas's pouch. Great collapse after the operation; convalescence rapid. Health good till October; recurrence in pelvis; died (Oldham workhouse) Dec. 24th, 1887.
49	J. A.	33	S.	May 18	Single cyst, right broad ligament; wall vascular; contents chocolate-brown in colour; quantity, 42 fl. oz.; weight of whole, 3 lb. 4 oz.	Parietal, recent.	None	Normal.	R.	Temperature in afternoon of 19th 100° to 100·4°, otherwise under 100° throughout. Recovery uninterrupted. Rice pudding on 20th, chop on 22nd; bowels acted on 24th.
50	A. W.	62	W.	May 25	Multilocular cysto-sarcoma, right ovary; weight, 5 lb. 5 oz.	Insignificant.	60 hrs.	Removed by abdominal section 2 years previously. (No. 31 in former paper.)	R.	Temp. never exceeded 99·6°. Recovery rapid. A few months later sarcomatous tumours appeared in the chest and other parts.
51	E. L.	30	M.	June 10	Cystic adenoma, left ovary; chocolate-coloured contents; weight, 21 lb. 10 oz.	Parietal: numerous and vascular.	72 hrs.	Normal.	R.	History of peritonitis for two months before admission. Temperature on the evening of 10th 100·8°, and of 11th 100°; at no other time did it reach 100°. Fish for dinner on the 14th.
52	J. H.	26	S.	Aug. 17	Cystic adenoma, left ovary; weight, 7 lb. 5 oz.	None.	None	Slightly enlarged. Not removed.	R.	Highest temperature after the operation 99·8°. Recovery rapid.
53	E. Y.	32	M.	Oct. 19	Cystic adenoma of both ovaries; right, size of cocoanut; left, size of orange; combined weight, 3 lb.	None.	29 hrs.	See under "Nature of Tumour."	R.	Highest temp. 100·2° (Oct. 20th). Meat dinner on 25th.
54	M. R.	21	M.	1888. Feb. 8	Cystic adenoma, left ovary; weight, 2 lb. 3 oz.	None.	None	Slightly enlarged, cystic. Removed.	R.	Highest temperature 99·4°.
55	F. H.	34	M.	Feb. 29	Cystic adenoma of both ovaries; weight of left, 8 lb. 8 oz.; right smaller, size of orange.	Omental.	72 hrs.	See under "Nature of Tumour."	R.	Temperature 10 P.M. on 29th, 100·2°; 2 A.M. on March 1st, 100°; otherwise below 100° throughout. Fish dinner on March 6th.
56	A. G.	29	M.	March 2	Small cystic adenoma of both ovaries and fibroma (weight, 2lb. 2oz.) attached by pedicle to left ovary.	None.	48 hrs.	See under "Nature of Tumour."	R.	Highest temperature (evening of day of operation) 100°. Discharged cured on March 24th.

The operations in this table were all performed in St. Mary's Hospital, Manchester.

the rise only lasted eight hours, the temperature at other times never exceeding 100°. In one case the highest point reached was 100·8°, in another 100·4°, in three cases 100·2°, and in one 100°. In the remaining three cases the maximum temperature was below 100°.

Solid food, in the form of fish or chop, was given in three cases on the fifth day, in three on the sixth, in four on the seventh, and in one on the eighth.

The date of the removal of the sutures was the sixth day in four cases, the seventh day in one case, and the eighth day in four cases. In two cases the date is not recorded.

The dressings in all cases consisted simply of dry wood-wool pads, and a many-tailed flannel bandage. Where no drainage was used, the pads were changed for the first time in two cases on the fourth day, and in two on the sixth.

In reference to my somewhat frequent use of the glass drainage tube, I should like to call attention to the results of some recent investigations into the behaviour of pyogenic micro-organisms when injected into the peritoneal cavity. They are well summarised by Mr. Watson Cheyne in his third Hunterian lecture before the Royal College of Surgeons for 1888. It is shown that when the cocci were introduced into the functionally active peritoneum in small numbers only, and suspended in a comparatively small amount of fluid, the extraordinary absorbent powers of the peritoneum were equal to the occasion; the cocci and fluid disappeared, and no harm resulted. If, on the other hand, the cocci were injected in large numbers, or if they were surrounded by such material as blood clot, in which they can develop, or were suspended in a quantity of fluid too large to be readily absorbed, suppurative peritonitis was set up.

The lessons to those engaged in abdominal surgery are obvious. We must do all we can to prevent the introduction of these micro-organisms, and, in case some few should gain an entrance in spite of us, we must remove the conditions that are known to favour their development, first, by thoroughly cleansing the peritoneum at the time of the operation, and, secondly, by employing drainage whenever there is likely to be much subsequent oozing of blood or effusion of serum into the peritoneal cavity. The drainage tube need not, as a rule, be kept in more than twenty-four or forty-eight hours; any fluid, whether blood or serum, poured out after this time is usually too trifling in amount to be a source of danger. Nor is it necessary when drainage is employed to change the dressings so frequently as some authorities would have us believe. The wood-wool pads absorb the discharges so perfectly that two or, at the most, three dressings in the twenty-four hours are all that is usually required.

(To be concluded.)

THE TONSILS (FAUCIAL, LINGUAL, PHARYNGEAL, AND DISCRETE); THEIR FUNCTIONS AND RELATION TO AFFECTIONS OF THE THROAT AND NOSE.

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IT has long been known that lymphoid tissue, especially in the form of lymph follicles, is very extensively massed together in the naso-pharynx and pharynx. The most conspicuous of these masses, the faucial tonsils, are very familiar pathologically. Likewise is that mass known as the pharyngeal or Luschka's tonsil, situated in the vault of the naso-pharynx, and which, when hypertrophied, forms post-nasal growths. To a less extent is appreciated that aggregation of crypts and follicles, called the lingual or fourth tonsil, situated at the base of the tongue between the circumvallate papillæ and the epiglottis, although its pathological conditions are among the most fruitful causes of many of the paræsthesiæ and dysæsthesiæ of the throat. To the above must be added those discrete patches of follicles on the pharyngeal walls which form the anatomical lesion in chronic granular pharyngitis, and an enumeration has been made of the principal groups concerned in morbid states of this area. To understand why these various tonsils are so pre-eminently and conspicuously affected in diseases of the throat and nose, it is necessary to glance at their relations to adjacent structures and to the functions which they perform in the channels in which they are found, as far as is known; for there can be no doubt that such very large masses, exhibiting, moreover, some complexity of arrangement and sharing so readily in disease, must serve in the performance of some very important physiological function or functions.

The Faucial Tonsils.—Taking first the faucial tonsils, it must be remarked that physiologists have been very much in the dark as to their true functions, if we are to judge by the statements, or absence of statements, in the different English text-books of physiology; and physicians and laryngologists have not elucidated the matter much. The prevailing view appears to be that the faucial tonsils are essentially organs for the secretion of a lubricating fluid to aid in moistening the bolus of food before deglutition. Now, as the faucial tonsils are developmentally portions of the mucous membrane, there is no reason why they should not be provided with mucous glands to the same extent as the rest of the mucosa, and so secrete a little lubricating fluid, though insignificant in amount compared with that from the salivary glands. But that this secretion is quite a subsidiary and unimportant function of the faucial tonsils is palpable from the facts that in any tonsil, healthy or diseased, infantile or adult, the component tissue is lymphoid, arranged in follicles, with more or less fibrous tissue; and that the secreting mucous glands are very scanty, and, indeed, in the ordinary excised tonsil not demonstrable. No doubt, when these organs have been excised for hypertrophy, the fibroid changes have caused atrophy of whatever gland tubes there might have been. Such fanciful theories as that the faucial tonsils are developed as compensatory organs for warming the inspired air when there is nasal obstruction, that they are reservoirs of nutriment like adipose tissue, and that their function is to keep the liquor amnii from passing into the fœtal pharynx require no refutation here. It is to Dr. Hingston Fox in his admirable papers[1] that we are chiefly indebted for a lucid exposition as to some of the main functions of the faucial tonsils. His conclusions are, firstly, that the faucial tonsils act in the prevention of fluid waste in the economy by reabsorbing the buccal secretions to a large extent after their work is done, and especially in the intervals of the deglutition acts; secondly, that they absorb certain of the elements of the food bolus as it is squeezed past them in deglutition; and, thirdly, that they form part of the blood-manufacturing system, and use up any nutriment remaining in the spent buccal secretions, acting, as he poetically expresses it, as "nurseries for young leucocytes, planted by the water-side, and drawing their sustenance from the nutrient stream." The facts on which these views are based may be classified as follows:—Firstly, the *anatomical*. The tonsils are like sponges in texture, consistence, and structure, being riddled with lacunæ or crypts. Every bolus of food must be squeezed against them as it is swallowed, a condition most favourable for the transfer of soluble matters. Then in the intervals of deglutition these spongy organs lie in the glosso-epiglottic fossæ, soaking in the buccal secretions, which fill up all their pores, and are delayed in their passage to the pharynx, if not entirely absorbed. Further, the tonsils are constructed on the type of a mucous membrane corrugated so as to expose a large surface to something, and on these corrugations are thickly studded lymph follicles, as well as in these organs a very rich plexus of lymphatic vessels, which must have some function, and what more probable than the relation suggested of which we have so much confirmatory evidence? Also, these follicle aggregations are situated at places just below the output of the buccal secretions, and in the course which these must take.—Secondly, the *histological*. The faucial tonsils are composed of tissue—lymphoid follicles—almost identical with that of the essential parts of the blood-manufacturing system, the spleen, and lymphatic glands. Moreover, these adenoid follicles are densely crowded with leucocytes in all stages of development and with dividing nuclei. The lymphatic vessel plexus throughout the tonsils is one of the richest in the body.—Thirdly, the *physiological*. The faucial tonsils have very free arterial blood supply, which implies very considerable work done. Next, it is a general law that fluids thrown out in the intestinal canal are

[1] THE LANCET and Journal of Anatomy and Physiology, 1886.

absorbed by the segment of the intestine below, and in this area we have similar structures, the solitary and agminated glands, which are not found elsewhere in the body. Then, as a general rule, in health the tonsils atrophy in middle and late life, when blood manufacture is less active, and, on the other hand, tend to be large in children, when lymphoid tissues elsewhere are abundant and active, and blood manufacture is at its climax for the rapid processes of growth and nutrition. The considerations already stated render the correctness of the above views most probable, and it is the object of this paper to show that clinical and pathological facts harmonise with and corroborate them; and also support the view that the other tonsils are largely channels of absorption.

The Pharyngeal Tonsil.—The anatomy and histology of this body in all essentials is that of the faucial tonsils; there are not so many crypts, nor are they so deep or subdivided, but there are differences of degree. These facts alone would tend to show that its function is not dissimilar—viz., the prevention of waste of some secretion. Now, in the horizontal position of the body, in man, all the nasal and lacrymal secretions are bound to flow over it. Here, then, are all the conditions required on the hypothesis above enunciated; and when the facts from disease are added, the conclusion will be unavoidable that this tonsil saves and elaborates the spent nasal and lacrymal secretions.

The Lingual Tonsil.—An observation was recorded many years ago by Dr. Horace Dobell in THE LANCET, and reprinted in his work on Winter Cough (third edition), that the uvula serves to convey the nasal secretions on to the base of the tongue in a plane anterior to the epiglottis, so keeping the constantly dripping fluids out of the larynx. This view was independently arrived at by me, and published in THE LANCET and in the *British Medical Journal* (vol. i., 1888); but having since found that I have been anticipated by Dr. Dobell, I take this opportunity of crediting him with priority. My paper, however, read before the Harveian Society in 1888 also pointed out, that in the erect posture these nasal and lacrymal secretions were dripped by the uvula on to an aggregation of crypts and follicles on the base of the tongue, such as was concerned elsewhere in the reabsorption of fluids and blood manufacture, and claimed that the same functions took place here. It is obvious that the buccal secretions also to some extent come in contact with the lingual tonsil; also that any portions of fluid not dealt with by the tonsils find the epiglottis keeps them out of the larynx, and run along the grooved lateral spouts of the epiglottis into the pyriform sinuses or hyoid fossæ, when they are swallowed.

Before considering pathological causes which affect preeminently one or the other tonsil, it might be as well to state here that usually all the tonsils are more or less involved, and that anatomical lesions are rarely confined to any one.

Commencing first with the pharyngeal tonsil, it must be premised that its morbid conditions are connected with the respiratory current and the channel in which it lies. Of all proximate causes of affections of this body, the most frequent is chronic nasal catarrh and I shall therefore offer no apology for suggesting an explanation of its genesis. I believe it may be sought in the extreme variations in the temperature, humidity, and purity of the air breathed by civilised house-dwelling mankind, and consequently the great variation in the amount of moistening, warming, and filtering that has to be performed by the erectile mechanism of the nose. The savage, living in a state of nature, does not many times a day rapidly change his air currents from a temperature of 80° or more, and often laden with organic impurity and scorched up by a stove, for one frequently near the freezing point, and of widely different degrees of humidity and purity. The air he breathes is of a fairly constant quality comparatively by day and night. Hence there is a certain normal accommodation of his nasal erectile tissues to the work they have to do, which is not suddenly, frequently, or very materially departed from. We have in these considerations a possible explanation of the freedom of the Red Indians from catarrh, and the effectiveness of their nasal channels for breathing purposes as described by Catlin, who spent many years among them. On the other hand, with us civilised moderns, the frequent and sudden changes lead to corresponding activity in the erectile mechanism of the nose, and this repeated for months and years causes the erectile tissues to get into a state of irritable weakness, and to be permanently erected. There is then chronic congestion and discharge of a secretion differing somewhat from the normal. The exciting causes being constantly in action, chronic rhinitis is produced, then hypertrophy of the mucosa and narrowing of the passages. All this time the more or less perverted and acrid secretions have replaced the healthy ones, and have passed back constantly to the pharyngeal tonsil, which, having to tackle irritating secretions, gets swollen, inflamed, and in time hypertrophied, forming post-nasal growths, with all their attendant evils. Having had constantly under my observation some hundreds of children for the last five years, I have been able over and over again to trace the whole development of post-nasal growths from ordinary chronic nasal catarrh, and that in children who have lived under the most favourable hygienic *régime*, except in as far as the above-mentioned variations in the physical characters of the inspired air go; and it is to these variations alone that I can attribute the sequence of events. This state of chronic inflammation and debility of the tissues of the upper respiratory tract is not distinguishable from struma, and is often associated with general anæmia and debility, lymphatic gland affection of the neck, concomitant affections of the conjunctivæ and ear (probably extension of inflammatory mischief up the nasal ducts and Eustachian tubes), and also by the forced substitution of buccal for nasal respiration, leading to depressed vitality of the tissues of the rest of the respiratory tract, facilitating the supervention of pneumonia and bronchitis, and preparing the soil for the invasion of the tubercle bacillus. The above account indicates correctly, I believe, the relation between chronic nasal catarrh and pharyngeal tonsil hypertrophy, and also between the latter and the other morbid states referred to. But there are other causes than this, both of nasal catarrh and of acute inflammation of pharyngeal tonsil, the chief one among them being mechanical irritants, such as ordinary dust, trade dust, pollen, or other finely divided matter, which, carried in by the respiratory current, ultimately find their way back to the pharyngeal tonsil in the secretions which flush the passages, thus causing direct irritation by their presence. In the same way the germs of the specific fevers—measles, scarlet fever, variola, &c.—reach the pharyngeal tonsil and cause it to inflame, block the nasal passages in varying degrees, and, by damming back secretions, to produce anterior rhinorrhœa; similarly Eustachian obstruction, retention of secretions, ear abscess, otorrhœa, and life-long deafness. Attention to the nose and naso-pharynx in specific fevers will be likely to prevent the conditions which are not susceptible of cure. Another cause of pharyngeal tonsil enlargement is to be found in its absorption of irritant matters regurgitated or vomited by infants into their naso-pharynx. This often produces an acute coryza and nasal obstruction, independent of mechanical occlusion of nares by vomited matter, and due to direct irritation and enlargement of pharyngeal tonsil. Irritating vaginal secretions introduced during parturition and exciting snuffles is a well-known cause of posterior nasal obstruction from inflamed pharyngeal tonsil. It is a striking clinical fact that there is an overwhelming preponderance of pharyngeal tonsil mischief in the young. Is the cause to be sought in the smallness of the naso-pharynx, the early blocking of the nose, and the consequent stagnation and decomposition of the retained secretions? Judging from the anterior rhinorrhœa of such an irritating character as to cause eczema and the foulness of the secretions dislodged in digital examination of post-nasal growths, I conclude that this is often so, and that the decomposing secretions keep up the enlargement commenced by an ordinary catarrh.

The lingual tonsil next requires consideration, as it is in relation with the same secretions as the pharyngeal, only especially in the erect position. All that has been said, therefore, as to the causes of chronic catarrh of the upper respiratory tract applies with equal force to lingual as to pharyngeal tonsil diseases, and in this conveyance of the acrid products of inflammation we have the main cause of its abnormal states. But there are many causes besides, especially the presence of deleterious and irritating matters in the alimentary ingesta. I would especially mention alcohol, condiments, very hot fluids, very cold fluids, or frequent alternations of these. Each of these can at times be distinctly traced as the exciting cause of lingual tonsil hypertrophy, which, in its turn, is the anatomical fact in the production of the most obstinate and otherwise incomprehensible paræsthesiæ. In the case of this tonsil, too, morbid influences derived from vitiated blood and secretions are

very manifest. I refer especially to gout and rheumatism. Both the nasal and buccal secretions are surcharged with the poisons of those diseases periodically; and there can be no doubt that the inflammatory condition of lingual tonsil seen, and central angina and constriction complained of, so often in these diseases, and which often precede other symptoms or are alone present, are due to the irritation of the lingual tonsil by the perverted secretions. Evidence confirmatory of this view is found in the fact that anti-diathetic treatment speedily cures the condition. The lingual tonsil does not show the same predisposition to be affected in syphilis as do the faucial tonsils. I venture to suggest that the syphilitic poison is excreted with the buccal secretions rather than with the nasal; and, as has already been stated, it is with the former that the faucial tonsils are in special correlation. An interesting observation bearing on lingual tonsil affection in scarlet fever was recorded to me by a pathologist who asked an explanation. In a fatal case he had observed ulcerations and erosions localised in the area of this organ. This pointed to the fact that the secretions loaded with germs and inflammatory products had vented their fury here, and seems singularly confirmatory of the importance of the lingual tonsil. Taking lupus of the nose and throat again, lupoid infiltrations and ulcerations have been found localised in the lingual tonsil area (Chiari and Reil), the infection having clearly been carried over healthy parts to a place where it could enter with the secretions and reproduce the disease. When there is nasal obstruction and substituted mouth breathing, all the impurities of the environing atmosphere enter the mouth, and many of them alighting on the mucous membrane are washed on to the lingual and faucial tonsils. Moreover, work is cast on the linings of the mouth—that of warming and moistening the air—which does not belong to them. Hence drying of the surface and failure of the secretions to wash away the decomposing débris. In the morning the patient complains of a dry mouth and a slight sore throat, due to inflammation of the lingual and faucial tonsils. This at first passes off during the day, but after some time leads to hypertrophy of the irritated structures. Other frequent and potent causes of lingual tonsil abnormalities are tobacco smoking, chewing, and snuffing, their action being irritant to the lymph follicles throughout the upper respiratory tract. Septic influences, bad teeth, neglected dirty teeth, false teeth not kept clean or not well fitting, must be added to the list of common causes of lymph follicle irritation and hypertrophy throughout the whole area under consideration, and must be attended to before a cure can be expected. Lingual tonsil mischief is specially met with in adults, and not so much in children. The reasons I would suggest are that the latter do not indulge in alcohol, condiments, or very hot or very cold fluids; and also that the irritating secretions which in children are penned up in the nose or directed forwards owing to enlarged pharyngeal tonsil to produce a rhinorrhœa, in adults pass on (there being more room in the naso-pharynx) to the lingual tonsil.

Concerning the faucial tonsils, the special relation of these to the buccal secretions has been referred to, and also that the factors in the production of disease of the other tonsils affect these likewise. It is unnecessary, therefore, to recapitulate, but it remains for me to remark additional facts. Very often unilateral hypertrophy of a faucial tonsil is seen. How often is it not in relation with a carious tooth on the same side, constantly contaminating the buccal secretions on that side? There can be little doubt that the tonsils are the sites where the poison of scarlatina, measles, and diphtheria usually enter the system, since they are the parts first and most constantly, and often alone, visibly affected; and the lymphatic glands in direct communication with them most markedly, soonest, and most frequently involved. Faulty voice production and excessive use of the voice are very important causes of affections of all the tonsils. Excessive use demands excessive lubrication, and the latter implies excessive absorption on the part of all the lymphoid follicles. Hence the diffusiveness, chronicity, and obstinacy of the changes met with in the throats of clergymen, actors, and Board School teachers. Regarding lacunar or so-called follicular tonsillitis (which, by the way, I have noticed more than once well marked in the crypts of the lingual tonsil), there are two distinct varieties clinically. The first is that in which superficial inflammation and swelling of the mucosa blocks the crypt orifices and causes retention of the shed epithelium and débris. This form is acute and usually easily curable, and may be brought about by septic or common catarrhal causes. It is painful, and requires sedative and antiphlogistic treatment. This variety often forms the starting-point of a lacunar abscess, or the process may extend deeper and peri-tonsillar abscess or quinsy ensue. The second form is chronic, and depends on a natural or acquired sluggishness with which the desquamation processes of the epithelium lining the tonsillar crypts are performed, and the débris is not normally extruded by a *vis a tergo*. This is not septic or painful, though there may be slight stiffness and discomfort. It is very chronic in course, and difficult to overcome, yielding best, however, to solvent and stimulant local applications. The discrete nodules in the pharyngeal walls partake in the morbid processes going on in the other tonsils, and are similarly affected by the causes acting on them.

It now remains for me to state that it has not been my object in this paper to give details of symptoms and treatment, and merely to indicate the lines upon which nose and throat affections should be treated when, as is generally the case, the various tonsils—the points of maximum irritation—show palpable signs of morbid action; and it must be observed that, when the various methods of treatment in use in the past are considered in the light of the above views as to the functions of the tonsils, it will be seen that these views afford a scientific explanation of the success of those empirical methods which have been hitherto the most approved. These lines would be, firstly, the ensurance of physiological rest to the affected tissues by arresting morbid and lessening profuse secretions, and promoting derivative action into other channels. In acute and sub-acute affections, a blue pill, followed by regular small doses of belladonna, gives excellent results. Secondly, the removal of all causes of irritation and inflammation in the inspired air, whether due to occupation, habits, or conditions of existence, and a similar regulation of the habitual alimentary ingesta. Thirdly, the soothing of any acute inflammation or pain by ordinary measures, ice, bland fluids, jelly, cocaine, &c. Fourthly, the attack of any diathetic condition which may be causing perversion of secretions—as gout, rheumatism, syphilis, &c.,—on general principles. Fifthly, the removal of any hypertrophied tissue—such as enlarged tonsils, post-nasal growths, hypertrophied lingual tonsil, granules of granular pharynx, &c.—which may be occluding any physiological channel or causing mechanical irritation of adjacent parts by the numerous approved methods at our disposal. Sixthly, the prevention of the accumulation or stagnation of any of the secretions of the nose, mouth, or pharynx by cleansing and antiseptic washes.

In conclusion I would say—1. The significance of the various tonsils is in their palpable relation to the blood-manufacturing system and to the outpour of copious secretions. The relations of the tonsils to the rest of the organism can be well appreciated by comparing them with the relations of the sewage farm to the town whose refuse it makes use of, and to which it returns its elaborated products. 2. If any of the secretions delivered to the tonsils become contaminated in any way with irritating matters, whether generated in the system or introduced from without, those tonsils in physiological correlation with the affected secretion show irritative changes varying in degree. 3. The functions and affections of the various tonsils afford the key to the comprehension and scientific treatment—and the prevention—of many of the most intractable and recurrent disorders of the nose and throat.

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ON A GROUP OF CASES TREATED WITH STROPHANTHUS HISPIDUS.

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THE most accurate method of judging the value of any drug in curing a disease or in relieving symptoms is ascertained by carefully watching the changes it produces in the clinical phenomena of a case. By this form of observation we are able to elucidate theories and to convert them into therapeutical facts. A scrupulous study of a few well-selected cases has precedence over the off-handed manner of arriving at a conclusion by a bare statistical majority. The following cases are small in number, but I believe that my

readers will find them to be correctly adopted, and also studied with sufficient minuteness to illustrate pretty fully the action of strophanthus on the cardiac muscle.

CASE 1.—On Sept. 29th, 1887, I was desired to visit A. N——, a military gentleman of great reputation, aged sixty-eight years, who complained of breathlessness, which was greatly aggravated on any exertion. He also complained of palpitation, occasional fits of dry coughing, and a feeling of tightness about the upper region of his chest. He was likewise very weak and languid. Hereditary tendencies pointed to gout. The breathlessness first appeared in August, 1886. Objective examination exhibited a spare individual, well formed, military, 5 ft. 11 in. in height, and 11 st. 9 lb. in weight. Face pale, with an expression of being depressed; and the mouth open, through which he respired. Cyanosis of the alæ nasi, lips, ears, and nails. A few dilated venules were distributed on each cheek, and the veins of his hands were over-distended with blood. The conjunctivæ were somewhat yellow. On inspecting the præcordial region, a systolic undulatory movement was perceptible in the upper part of the epigastrium, extending for about three inches along the lower border of the lowest cartilage. A slight visible impulse was also present between the sixth and seventh ribs four inches from the middle line of the sternum, and running along the sixth interspace for an inch. Palpation conveyed an irregular action of the heart to the hand, with a distinct thrill accompanying each systole. The cardiac impulse was diffused, and to be felt in the fourth, fifth, and sixth intercostal spaces; it was greatly wanting in force. The point of maximum intensity was in the sixth intercostal space, four inches and a half from the middle line of the trunk, considerably to the left of the nipple line. The absolute and relative cardiac dulness was increased principally downwards and to the left, also to the right of the sternum in a less degree. There was a systolic murmur in the mitral area almost entirely replacing the first heart sound, and which was propagated towards the angle of the left scapula and back; it was very audible over the left auricular appendix. There was also a slightly presystolic rough murmur in the same area. The pulse was 86, rhythm irregular, and in character it was small, feeble, and very compressible. The respiratory system afforded signs of extreme congestion of both lungs. The urine was diminished in quantity; of a muddy yellow colour; sp. gr. 1025; reaction acid; boiling a filtered specimen yielded about half its volume of albumen; the only deposits present were amorphous urates. My diagnosis was mitral incompetence, with failure in compensation, and dilatation of both ventricles, especially the right one. There was great congestion of both lungs, and also to a little less extent of the liver, stomach, kidneys, and to a still less degree of the spleen. The treatment consisted in the administration of the following mixture: Tincture of strophanthus, 2½ dr.; spirits of chloroform, 2 dr.; compound infusion of gentian, 6 oz.; two teaspoonfuls to be taken in a little water every three hours. The diet ordered consisted of beef-tea, peptonised milk gruel, eggs beaten up and in custards, milk puddings, fish, &c. On Sept. 30th, the patient was feeling a shade better. Pulse 82. He had taken a little more food. On Oct. 1st he felt that he was improving. Pulse 80. Medicine repeated. On the 2nd he was still improving. Pulse 78. On the 3rd he was decidedly better, the pulse being stronger, and there was less dyspnœa and palpitation. The disagreeable sensation of tightness at the upper part of his chest was subsiding. To cut the history short, the patient was well enough to leave off taking the medicine on Nov. 9th, when he stated that he felt better than he had done for over a year. He remained apparently well until Feb. 7th, when I was sent for again, as he complained of returning symptoms, and I prescribed the following: Tincture of strophanthus, tincture of nux vomica, and spirit of chloroform, of each one drachm and a half; compound infusion of gentian to eight ounces; a tablespoonful to be taken three times a day. The patient, unable to wait until my next visit, wrote to me on the 9th, saying what a great amount of benefit he was deriving from taking this mixture, and hoped very much that I would continue it. However, three bottles of the above succeeded in re-establishing compensation, when he felt well enough to discontinue it again. The pulse was now perfectly regular in rhythm, and strong. The tongue was clean, and appetite good. The liver was smaller, and acting well. There was no congestion of his lungs, and no albumen in the urine. The patient has remained well since, without any returning symptoms.

CASE 2.—Mrs. V——, aged forty-nine years, complained of being short of breath and of palpitation, which were greatly increased on exertion; she had also a violent cough and anasarca. The patient stated that she had been ailing more or less for two years and a half. She had an attack of bronchitis about Christmas, 1886, and has also had two subsequent ones. She has suffered from rheumatism at times within the last six years, and had an acute attack thirteen years ago. There is a family history of rheumatism on her father's side. Her dyspnœa commenced about two years and a half ago, and was never properly cured, although treated by several medical gentlemen. Height 5 ft. 2 in.; weight 177 lb. Well nourished, with a moderate amount of adiposity. Cyanosis of lips, cheeks, ears, and nails. Œdema of feet, legs, abdominal walls, and chest. Slight undulatory movements synchronous with the ventricular systole were visible in the upper part of the epigastrium. Swelling and pulsations of both right and left jugular veins were present. The action of the heart was very weak, extremely irregular, and at times also intermittent; systolic thrill in the mitral area; percussion dulness increased chiefly downwards and to the left, and no sense of resistance. On auscultation, there was a mitral systolic murmur completely replacing the first cardiac sound and propagated to the maxilla and back, and it could be distinctly heard in the left vertebral groove. The pulse was extremely irregular, at times intermittent, and also very weak. She had congestion of both lungs and bronchi, caused by the backward pressure on the circulation; this same pressure told on the portal circulation, causing enlargement and tenderness of the liver. The spleen and kidneys were also congested to a less extent; but the backward pressure in the line of the circulation had gone beyond this, and was affecting the systemic veins, demonstrated by the above-mentioned œdema. The urine was very greatly diminished in quantity, sp. gr. 1026, and contained a very large amount of albumen. The diagnosis was mitral regurgitation, with failure in compensation, &c. The medicinal treatment was the exhibition of the tinctures of strophanthus and nux vomica. Compensation was soon obtained under this treatment, the pulse gradually becoming regular and strong. The backward pressure was relieved, and the congestion of the internal organs and œdema entirely disappeared. When she left off taking the strophanthus there was no dyspnœa or palpitation, no albumen in the urine, and she was well, with the exception that her mitral murmur was still audible.

CASE 3.—E. O——, aged forty-seven, was complaining of a violent pain below the left nipple, together with dyspnœa and palpitation. He came to me for the first time on Jan. 21st, complaining of the pain only, which I then thought was of a neurosal character, and treated him with sedatives, which afforded him relief for some time. In March he came under the observation of my locum tenens, seeking advice for a return of the same pain, and he was prescribed something similar to what I had previously given him. He resumed work after a fortnight's rest. But he was not destined for a prolonged release of his symptom, and at the end of April I was again consulted, when the other signs above mentioned had become manifested. His height was 5 ft. 4 in, and his weight 10 st. 11 lb. He was well developed and muscular. There was commencing cyanosis of the alæ nasi, lips, and helix of the ears. Temperament neurotic; tongue slightly coated at its back part. There had been developed an undulatory systolic movement in the upper part of the epigastrium. The apex beat was altered in position, and was thrown into the sixth intercostal space four inches and a half from the middle line of the body and outside the nipple line. Percussion showed that the cardiac dulness was increased downwards, and a little to the left. A systolic mitral murmur, which I had not detected before, was quite audible. It was propagated with the greatest intensity towards the axilla and back, where it became lost. Pulse rapid, weak, and very compressible. Both his lungs were now congested, especially at the bases posteriorly. Urine normal. Diagnosis: Mitral reflux, with commencing failure in compensation. Consequently, I deemed it advisable to try strophanthus, and am pleased to say the result was most gratifying. The patient resumed work on May 29th, and still continues to follow his employment.

CASE 4.—Mrs. F——, aged forty-seven, on May 17th complained of being very weak and faint, with some diarrhœa. On examination, I found that she was a tall woman,

well developed, but with her muscles in a very flabby condition. She was lying flat on her back in bed in an adynamic state, with the face pale and expressionless. Her diathesis was not well marked. Temperature 101·4°. Tongue a little coated, very flabby, and with the fungiform papillæ abnormally raised. Appetite bad, with thirst, and the odour of her breath disagreeable. There was tenderness on pressure in the epigastrium, but in every other respect the abdomen was normal. There was no visible apex beat, and the cardiac impulse was almost imperceptible to palpation. The first cardiac sound was inaudible, with some accentuation of the second heart sound in the mitral area. There were no murmurs present, and the action of the cardiac muscle was extremely weak. Pulse 110, rhythm regular, and in character very small and weak, with deficient filling of the arteries. I gave her strophanthus and nux vomica, together with astringent powders for her diarrhœa, and her case ended favourably on June 3rd, when she was crossed off my list in an excellent state of health.

CASE 5.—Mrs. B——, aged fifty-seven years, a chronic invalid, who complained of a variety of variable symptoms, but principally of dyspnœa and weakness. I visited her for the first time on Nov. 13th last, when she presented the following condition. A short, stout woman, rather pale in the face, with a melancholic expression. Lips pale, of a bluish colour, and the teeth mostly all decayed. The tongue was coated down the centre with a yellowish-brown fur, being clean at each side of this band. There was anorexia, some thirst, with a sense of flatulent distension, and at times nausea and even vomiting. The liver appeared to be a little roughened on palpation, contracted slightly, and was tender to pressure. No impulse could be felt in the præcordia, and the quality of the heart sounds was very weak on auscultation in the various areas. The pulse was normal in frequency, but remarkably weak and compressible. The other systems were normal. This patient had been greatly addicted to drink for years, and was found to be suffering from chronic dipsomania, with cirrhosis of her liver. Owing to the extremely weakened condition of her circulatory system, I determined to try her with the following mixture: Tincture of strophanthus, 1 dr.; tincture of nux vomica, 1½ dr.; tincture of capsicum, 1 dr.; decoction of cinchona to 8 oz.; two tablespoonfuls to be taken thrice daily. She received considerable benefit from taking this mixture, especially so far as her circulatory system was concerned. Her heart improved so much as to be felt on palpation, and her craving for alcoholic drinks was not by any means so great. I think that possibly her desire for so much alcohol was in a great measure due to the weakened state of her circulation, with an improper filling of her cerebral arteries causing anæmia of the brain; and in order to arouse this flagging circulation she drank alcohol freely.

CASE 6.—H. S——, aged fifty-nine, complained of being short of breath on the least exertion, or in stooping to lace his boots, or even to pick anything from the floor. He also felt a pain in the region of the heart. He had suffered from winter bronchitis for the last four years. He was a short, excessively stout person, with a pale face and gouty diathesis. It required very careful palpation to detect any impulse of the heart, as it was so very weak in its action, but natural in position. In quality the cardiac sounds were very weak at the different areas, especially the first sound in the mitral area. Pulse 78, regular, but weak, soft, and very compressible. The arteries were not degenerated. Diagnosis; Adipose infiltration upon and between the cardiac muscular fibres, causing this heart failure. The tincture of strophanthus and nux vomica, in five-minim doses of each three times a day, afforded him with very great relief. His lips have now become red, being pale and blue before. The face has also assumed a ruddy appearance. The cardiac muscle acts strongly, and the apex beat can be distinctly felt on palpation. The pulse is now 70, very much stronger in character, and the tone is excellent.

CASE 7.—G. S——, aged thirty-four years, came under my care in September, 1887, suffering from enteric fever, having had a very severe attack of this fever, lasting for fifty-three days, and with the intervention of several complications, the principal of them being pneumonia, hæmorrhage from the bowels, and thrombosis of the veins of the right leg. On Oct. 27th his circulation became very weak, and he was in imminent danger of death from cardiac failure. The state of his circulatory system was then as follows: Faintness and dyspnœa, with a marked tendency to syncope The apex beat was imperceptible to palpation. In the mitral area both the heart sounds were inaudible; but as the cup of the stethoscope was advanced towards the base of the heart the second sound gradually became audible, and it was distinctly so in the aortic area. Pulse 79, intermittent in rhythm, and remarkably feeble. The arteries were imperfectly filled with blood. The severity of the enteric fever had undoubtedly left this patient with a considerable amount of fatty degeneration of the muscular fibres of the heart. He was ordered a mixture containing a minim and a half of the tincture of strophanthus, combined with nux vomica, every half-hour. As he improved, the medicine was given less often, being ordered every hour, and afterwards every two and four hours. In the seventh mixture the nux vomica was left out entirely, and it was prescribed to be taken three times a day. This medicine evidently saved his life, and he resumed his usual employment last February. He continues to work, and now feels as strong as he ever did.

Remarks.—The most interesting features connected with the first, second, and the sixth cases are derived from the fact of the patients having taken large quantities of digitalis from time to time under the treatment of different medical gentlemen, and this without any very great improvement in any of them. With both of the first two patients I immediately supplanted digitalis by strophanthus; consequently I was in a position to weigh accurately from a clinical aspect the effect of these two drugs in mitral disease. I believe that I can conscientiously assert that our new remedy is vastly superior to the older one (digitalis), especially in mitral complaints and cardiac failures. It thoroughly established compensation, and caused extremely irregular and also intermittent pulses to become perfectly regular, in cases where digitalis had previously failed. It appears to act as a cardiac tonic by stimulating the cardiac muscle into a greater state of contraction, and also by prolonging this state of systole. Acting thus, it raises the blood pressure within the arteries in the various organs, as manifested by the diuresis produced in these cases; and in the fifth case by raising the tone of the cerebral circulation. It also seems to slow the rhythm of the heart, and to steady its diastole, giving it more time to nourish itself through the coronary arteries. In my opinion, when a patient is properly under the influence of strophanthus, it prevents an already dilated heart from assuming the same amount of dilatation after each systole as there previously existed, and this depends on the power this drug possesses in maintaining the cardiac muscular fibres in a state of contraction. I have never found strophanthus to cause the heart to beat irregularly, or to make the pulse more rapid in action, even when given in very large and continued doses, as is repeatedly observed with large doses of digitalis; neither is it cumulative in its action. The addition of nux vomica seems to accelerate and aid the therapeutical effects of strophanthus hispidus.

Anglesey.

CASE OF EXCAVATED MALIGNANT TUMOUR OF THE LUNG.

BY GRAHAM STEELL, M.D.,
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W. L——, aged forty-five, a tramcar guard, was admitted into the Manchester Infirmary on Feb. 27th, 1888. He had been in good health till May, 1887, when he suffered from an attack of hæmoptysis, for which he was treated in the infirmary. From this time his health gradually deteriorated, although cough and expectoration did not become features of his illness till the beginning of winter. He began to attend the out-patient room of the infirmary in August, when no physical sign of pulmonary disease could be detected; notwithstanding this fact and the absence of a tubercular family history, the case was regarded as one of phthisis. He attended more or less regularly during the winter, but his chest was not again examined for some time. At one of his visits he complained of a good deal of pain in his chest, and on examining it I was surprised to find the following physical signs: absolute dulness of the upper portion of the right lung, accompanied by great sense of resistance on percussion, and absence of breath sounds over

the dull area, except in the supra-spinous region and upper inter-scapular region, where a few moist sounds were audible, along with a feeble indeterminate breath sound. The veins of the right upper extremity were noticed to be decidedly enlarged. In January he expectorated a considerable quantity of very fetid matter, and from this time his breath became offensive, occasionally unbearably so. He brought up large quantities of sputa at intervals.

The patient's health was evidently fast declining, and, as I had come to the conclusion that his illness was not phthisis in the ordinary sense, I took him into the infirmary. The physical signs at the time of admission were as follows. On inspection, the upper part of the chest on the right side looked distinctly fuller than the left, while its movement was almost annulled. Below, the movements of the chest on the right side and the intercostal depressions appeared natural. On percussion in the infra-clavicular region a simply dull sound was elicited, but on strong percussion a decided though obscure tympanitic resonance became audible; and when the patient opened his mouth a forcible stroke produced imperfectly-developed cracked pot sound. In the right supra-clavicular and clavicular regions, and behind down to the level of the spine of the scapula, there was dulness. In front the dulness did not pass across the middle line. On auscultation, there was absence of breath sounds over the dull area in front; behind, an indeterminate breath sound, accompanied by a few obscure moist sounds, was heard. The veins of the upper extremity and infra-clavicular region were distended, and the right external jugular vein seemed fuller than the left. The sputa were fairly copious in amount and extremely offensive. The right pupil was smaller than the left. Before death, which took place on March 7th, certain changes had occurred. The veins had become more distended, and below the outer half of the clavicle a soft, though not fluctuating, swelling, which did not become larger during coughing or smaller during a deep inspiration, had developed; in front, the dulness had extended to a slight extent across the middle line; behind, the dulness had diminished, having given place to a resonance not very dissimilar to that of the corresponding region of the opposite side; abundant moist sounds had become audible over the left lung and unaffected portion of the right lung, evidently owing to œdema. The temperature during the nine days over which morning and evening observations were made only rose above normal twice, reaching on these occasions 100·6° and 101°.

The case presented clinically several interesting peculiarities, but it is to be regretted that the sputa were not examined microscopically, as they might have cleared up the nature of the cavity, the existence of which was rendered probable by the symptoms and signs. The following facts represent the clinical evidence which examination of the case afforded.

A.—Firstly, as to symptoms. 1. An illness beginning with hæmoptysis, followed by indefinite failure of health, cough and expectoration not being present for several months. 2. The complaint of a great deal of local pain. 3. Fetid expectoration, large quantities of which were brought up at intervals, after the manner which we know to be suggestive of a cavity in the lung.

B.—Secondly, as to physical signs. 1. The fulness of the upper part of the chest on the right side, combined with impaired movement of the same part. 2. The distension of the veins of the arm and neck, the subclavian being evidently more involved than the jugular. 3. The contraction of the right pupil. 4. The, at first absolute, dulness of the upper lobe of the right lung; obscure tympanitic resonance with cracked-pot sound on forcible percussion becoming subsequently developed in front. Behind, at a still later period, the occurrence of a similar diminution of dulness, the resonance, however, not possessing tympanitic quality. 5. The essential limitation of dulness to the affected side. Extension across the middle line was only noticed during the last few days of life, and then in very trifling amount.

The conclusions that could be legitimately drawn from the clinical facts just noted were, I think, these:—1. That the disease had begun in the lung (A 1, B 5). 2. That the whole of the upper lobe of the right lung was more or less consolidated (B 4). 3. That the upper lobe of the right lung contained a cavity (A 3, B 4). 4. That, whatever the cause of the consolidation, it was such as to cause centrifugal pressure (A 2; B 1, 2, 3).

It is usually and rightly believed that a mediastinal dulness differs from a lung dulness by passing across the middle line on the one hand, and on the other by its not involving the whole of the upper lobe of the lung so that it does not reach the costo-humeral angle, much less the posterior aspect. In these respects the dulness present in the case before us corresponded to a lung dulness, rather than to a mediastinal dulness, although at last to a very slight extent the middle line was transgressed. Intra-thoracic tumours are generally mediastinal, and rarely pulmonary. In the present case the evidence from symptoms as well as signs pointed to the lung as its seat, supposing, from the pressure symptoms and signs, that a tumour existed. Lastly, granting that there was a tumour of the lung, it was necessary to admit that the tumour was excavated. Lung tumours are rare, excavated lung tumours excessively so.

Post-mortem examination by Dr. HARRIS, pathologist to the infirmary.—Pleuræ: Both sides presented very tough old adhesions, which were firmer on the right than on the left side. On the right they were so tough as to require very great labour to remove the right lung from the chest. There was no pleural cavity remaining on the right side, and in the little space left on the opposite side there was no effusion. Lungs: The uppermost lobe of the right lung was voluminous, extending as far as, but not beyond, the median line in front. The whole of the interior of that lobe was hollowed out into an irregular cavity, which was filled with thick greenish-yellow material, which to the naked eye looked like pus, and emitted a very foul and peculiarly sickly odour. The walls of the cavity were very irregular, and formed by a soft greyish-white new growth. The growth forming the walls was in very small amount; in the greater part of the circumference of the cavity it did not exceed three-quarters of an inch in thickness. At the upper part of the cavity, however, there was a mass the size of a Tangerine orange, which projected into the interior of the space. It appeared as though there had been a large growth occupying the whole of the uppermost lobe, which had broken down in the centre, forming a space not unlike an abscess cavity. The growth was very soft, of greyish-white uniform appearance, with no indication of there being an alveolar structure. The appearance was uniform, like that of the round-celled sarcoma or the soft lympho-sarcomata. The growth everywhere extended up to the visceral layer of the pleura, and only at a few points could any trace of lung tissue be seen. The pleura over the cavity was only slightly thickened, and was adherent, as elsewhere, to the chest wall. The middle and lowermost lobe presented no abnormal appearances; there was no growth in either, nor in the pleura over either lobe. Percussion over the cavity in the uppermost lobe after the lung was removed from the body, but before any incision was made into the organ, gave a shallow tympanitic note. The left lung presented no abnormal appearance except in the apex, where there was a well marked cicatrix and puckering of the apex. The apex was depressed over an area the size of a half-crown piece, in consequence of the cicatrix in the lung tissue beneath. No caseous deposit. The pericardium presented no abnormal appearance. The heart showed engorgement of the right side with black blood, partly fluid, partly coagulated; no other abnormal appearance. The trachea presented no abnormality. The mucous membrane of the large bronchi was hyperæmic. From the bronchus leading to the uppermost lobe of the right lung was exuding some foul material similar to that found in the cavity in the corresponding lung. The liver weighed 3 lb. 8 oz. The spleen weighed 6 oz.; it was pale and somewhat soft, but in other respects presented no abnormal appearance. The kidneys were somewhat soft, but were otherwise normal. The œsophagus and stomach were healthy, as were also the peritoneum, intestine, and rectum. Microscopic examination of the tumour showed it to be a lympho-sarcoma.

Manchester.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The first meeting of the thirty-third session (1888–89) was held at the Royal West Kent Dispensary, Greenwich-road, on Oct. 12th, when the following officers for the ensuing session (1888–89) were elected, after which the President delivered the inaugural address: Presiden :—Dr. Peter Horrocks. Vice-Presidents: Messrs. Thomas Moore and J. Poland. Council: Drs. Ernest Clarke and Alexander Forsyth; Messrs. G. H. Cable, Peter Cooper, Mc Gavin, J. Brindley James, and Fredk. Moon. Treasurer: Dr. Prior Purvis. Sec. H. W. Roberts. Librarian: Dr. Ernest Clarke.

CHRONIC INFANTILE SCLEREMA AND PARALYSIS.

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BY this name it is desired to designate an affection of considerable rarity, characterised by slowly developing sclerema and weakness, ending in death, usually with convulsions, and often affecting many children of the same parents. The facts, as far as they are known to me, may first be narrated.

F. G——, aged five months and a half, was first seen on Aug. 22nd, 1884. The mother, an intelligent woman, brought the child because it was going the same way as her first-born. The history was given as follows. When the child was two months old she began to turn her hands in by a rotation movement of the shoulder, and it was also noted that the arms and legs began to grow limp and helpless, but which limb first showed the flaccidity cannot be ascertained. The mother thought that the "back" had always been helpless. The infant was very thin at the age of two months, but since then the skin had gradually got firmer and fatter, and the mother observed that a great fold or bar had developed above the buttock, just as with the first child. When seen, the child was able to take food well. The bowels, rather confined, acted once a day; micturition was natural. The infant took ample notice, the special senses seemed natural, and there had been no fit or squinting. The temperature in the rectum was 98·8°. The feet and legs felt firm and fat, and a regular thick fold existed above the nates; a great tendency to rotate in the arms at the shoulder was as remarkable as was the constant tendency to inversion of the right thigh at the hip joint. The big toes were drawn up on the dorsum, and the feet over-arched. A feeble cry, no knee jerk, with some rather flabby sclerema and fatness about the shoulders and lower parts of the neck, completed the positive morbid signs. On September 15th the right leg was noted to be everted and lying on the outer aspect; both legs dropped heavily when raised and let go; there was marked talipes equinus and varus; the child was a little sallow; the eyes moved well; laughing and frowning were feeble; the whole aspect was one of limpness and great quietude, but there was no tenderness. The skin and subcutaneous tissues of the left forearm were tough and infiltrated; the colour of the skin of the hard parts was natural, but, if manipulated, developed a bluish-red hue. Whilst examining the child some irregular clonic spasms of the facial and lingual muscles were noted. A strong faradic current elicited no reaction in the legs, arms, or forearms, and only slightly in the face; the occipito-frontalis and orbicular acted a little, the left side better than the right. On Oct. 19th the notes state that the cry had grown very much feebler, and the general limpness had become intense. The face was equally flushed and sweating; the breathing was almost wholly diaphragmatic; râles were heard in the chest. On Oct. 28th the patient was getting weaker. The breathing was more difficult, 50 per minute, and commencing with a sort of jerk. The face was still twitching at times. The urine collected contained no albumen or sugar. She "sometimes goes as cold as if she were dead." Heart beating 144 per minute. Arms still very much rotated in; sclerema more widespread, involving trunk; head sweating profusely. Death occurred on Nov. 7th. The brain only was allowed to be examined, and no sign of disease was detected either with the naked eye or microscope. Sections of the medulla oblongata particularly seemed normal. The first baby died at the age of four months and a half, was "queer" from birth, never sat up, turned its arms in, and had the tough skin.

B. G——, sister of the above, was brought to me at the age of three months. She began to be affected when six weeks old; the left arm first showed weakness, and later the right arm. The cry was noted to be weak as early as two weeks after birth. On Jan. 13th, 1888, when first seen, there was well-marked limp palsy of all four limbs and head; no knee jerks; talipes equinus of both feet; scleremato us state of limbs, shoulders, and buttocks, with the characteristic transverse fold across the loins. The urine was luckily collected once; it was watery and almost pigmentless, contained no albumen or sugar, and gave 1 per cent. of urea. The bowels acted naturally twice or thrice a day. The pulse was 120; the respiration about 36, but rather variable. I saw the child at her home in Camberwell several times, and on the last occasion noted that all the four limbs and head "flop" back when held up; the sclerema thickened the skin of both legs and both arms symmetrically, but the dorsa of the hands and feet were but slightly affected; a thin fold could not be picked up. The skin of the abdomen and chest was soft, but the fold picked up by the finger and thumb was too thick. The thickness of the lower limbs stopped quite abruptly at the level of the iliac crest, and symmetrically on the two sides. The scleremato us skin did not pit; its colour was slightly reddish blue. The skin of the back was soft, but a thin fold could not be nipped up with the finger and thumb. There was no excess of moisture, but the skin was not dry. The thighs had a slightly glazed appearance on the surface. Both feet were strongly extended at the ankle joint. The skin of the *sole* and *palm* was rather closely applied to the subcutaneous tissue, but yet there was not that scleremato us condition which obtained elsewhere. The hair on the scalp was natural. There was some power of movement in the upper limbs at all the joints, but the fingers seemed least paralysed; the only movement in the lower limbs was a very trifling flexion of some of the toes. The superficial reflexes appeared to be in abeyance everywhere. The facial muscles were not paralysed, nor the tongue; no spasms were noted. The ocular muscles appeared normal, as also the pupils. The breathing was almost entirely abdominal; the chest walls receded bilaterally; the alæ nasi worked; and there was some blueness of the lips and nail-beds. This child was treated by frictions with oil; arsenic, strychnia, and mercury were given internally. In neither of the children was there any evidence of syphilis. A boy aged two years and a half, the only other child, was perfectly healthy, and well grown in stature and weight. All three females of the family were affected, and all three died. In all the affection began about the same time (? was it really congenital); the first died at four and a half months, the second at eight, and the third at nine months.

Are these cases simply examples of sclerema neonatorum? Even if so, there are points of great interest. Faradisation failed to elicit muscular contraction where the limpness and paralysis were most marked. Would a simple skin-bound leg cause such extreme talipes equinus? Are local clonic spasms of the face symptoms of the last days of sclerema neonatorum? The clonic spasms can hardly be regarded as due to cyanosis and asphyxia; and suppose for a moment they were so due, why did the other muscles of the body not suffer spasm? We should be forced to admit something wrong with them or their nervous correspondents, because twitching fingers are—in my experience at least—quite as early, quite as much signs of asphyxia as flickerings of the face. There is no reason why the hypoglossal and spinal accessory nuclei or their muscular endings should not likewise discharge. Granted that the debility of sclerema neonatorum is a marked feature of that disease, are we sure that the want of movement is not a true paralysis? Questions are asked, but for the present this interrogative state of mind is the most scientific. Circulatory troubles hardly existed in my cases; the lung mischief must probably be regarded as due to the paralysis of the intercostal muscles and diaphragm, together with the soft yielding chest walls. The long duration of the cases proves that they did not belong to sclerema neonatorum as ordinarily witnessed, though chronic and subacute forms have been described. Suggestions of the relationship between infantile palsy, sclerema, and myxœdema have much occupied my attention. We know, however, so little that is certain. The following facts are interesting:—A condition of skin resembling, in its not pitting, myxœdema, and some forms of scleriasis, may be seen in infantile palsy and in other spinal paralyses. Likewise in certain cases of exophthalmic goitre an œdematous state of the integuments, which hardly, if at all, "pit," has been set down as "vaso-motor œdema," but at least the suggestion of its dependence on the nervous system requires consideration. In one of the last cases of sclerema and paralysis above mentioned the thyroid (and thymus) seemed natural at the necropsy. The spinal cord was healthy, and the skin (sections kindly prepared for me by Mr. A. E. Barton, lately clinical assistant and house physician at University College Hospital) showed the infiltration of the cutis with the wax-like deposit, and

a decided overgrowth of nuclei around the sweat glands and vessels of the skin, the latter condition corroborating Rasmussen, who believes the essential element in the changes in the skin to consist in this marked development of lymphoid cells, especially in the peri-vascular sheaths of the minute bloodvessels of the skin and subcutaneous tissue.

TWO CASES OF INTUSSUSCEPTION OF THE BOWEL.

BY F. R. HUMPHREYS, M.R.C.S., L.R.C.P. LOND.

CASE 1.—Edwin W——, aged two years and a half, was taken ill at 11 A.M. on Jan. 21st, after a good breakfast at 8.30 A.M. Sickness, followed by diarrhœa (with a streak of blood in it) and abdominal pain, were the first symptoms. The pain was intermittent, but very frequently repeated, and the child turned over on to his stomach on each recurrence, seeming to be in considerable pain. He was first seen early in the afternoon. He was then vomiting everything that he took, while at the same time he was complaining of hunger. The pulse was 118; respiration thoracic, 32; temperature 99·2°. The liver dulness extended half-way to the umbilicus. The abdomen on the right side was rigid and dull, and there was a lump to be felt about two inches to the right and one inch below the umbilicus. However, I was assured that there had been a considerable flow of blood with the urine, so that the case, with this point strongly and clearly impressed on me by the friends, looked like one of renal trouble. At 9.30 P.M. I was told that the previous blood came from the bowel, and that since then about two ounces and a half of blood (which I was shown) had also come from the bowel; this was nearly pure blood, and there were no clots. On examination of the abdominal tumour previously noted, distinct peristaltic movement was noticed in it, though it did not appear to have altered its position; it was about the size of a large walnut. On examination of the urine, there were plenty of phosphates, but no albumen. The diagnosis, therefore, was that of intussusception. I attached a No. 8 gum-elastic catheter to a Higginson's enema syringe, and injected about eight ounces of warm water into the rectum, passing the catheter about three inches in, when, after a little difficulty with the last half-ounce, something seemed to give, and, the child moving, the catheter slipped out; only slight force was used. On examination of the abdomen, the lump had disappeared, and the colon seemed to be full of water. Chloroform was unnecessary, the child being very good. A pad and bandage were then placed on the abdomen, the pad being over the right iliac fossa. He returned about four ounces of water, slightly blood stained, on being placed in a chair a few minutes later. Next day (the 22nd) I was told he had had a good night, there having been no sickness, pain, or passage of blood, and the bowels were easily and naturally open. The abdomen was rather tender, but no lump was to be felt, and the child appeared to have nearly quite recovered. Later in the day pain came on again, the right knee being drawn up and the head and body thrown back during the paroxysm; but, unlike the first attack, the child was not restless. There was dulness and tenderness at the spot where the tumour had originally been noticed. Temperature 99°. This pain continued at short intervals till Feb. 9th. There was sickness on Jan. 25th and 26th, and on the 27th Mr. Charters J. Symonds saw him with me. He considered the diagnosis a correct one, and thought there was probably some localised inflammatory affection remaining. When seen in the evening, there was a constant gurgling in the right iliac fossa. He was given increasing doses of opium up to seven minims and a half every four hours, but without any effect on the pain. A glycerine enema, suggested by Dr. Fly Smith, was then (Feb. 3rd) tried, and seemed to act well, both in emptying the rectum and relieving the pain. On Feb. 8th the child had fallen off a great deal from the constant pain, and had become very pale and weak. He had also cut two upper molars. On the 10th the pain had left him. A light fish dinner was ordered, the child craving for it. He had an attack of erythema fugax on March 1st, but had nearly recovered from that on the 3rd. He had been taken for a good long walk, and appeared quite well.

Notes by Mr. CHARTERS J. SYMONDS.—The unusual feature in this case was the persistence of pain after the reduction. This pain, moreover, was situated just at a point where the lump was observed to have disappeared, and was periodic in character, being evidently determined by peristaltic action. It appeared possible that the intussusception had been incompletely reduced, the caput cæci when threatened by congestion having a tendency to retain the depression. As opposed to this view was the absence of gurgling or the rising of a coil when the pain occurred. The only other suggestion in explanation of the prolonged symptoms was the injury inflicted by the strangulation. That this was severe was proved by the escape of so large a quantity of blood; and to the swollen condition remaining, and the succeeding local enteritis, or rather colitis, must be attributed the continued pain.

CASE 2.—In this case the patient was an infant only eight and a half months old. It was first seen on Aug. 9th. The history given was, briefly, that it had been in perfect health up to 3 A.M. on the 8th. At this hour it was seized with vomiting and pain, and a few minutes later passed a bloody stool. From that time up to 11 P.M. on the 9th there was incessant vomiting and constant flow of blood-stained mucus and serum. Once a little solid darkish material passed. When seen, the condition was as follows. The child was a fine one; it had been brought up at the breast. It lay on its back, with the knees drawn up, but every now and then put itself in the opisthotonos position, or one approaching it. It looked drawn and anxious. The pulse was full; the tongue red. Examination of the abdomen showed no change apparent to the eye; to the touch there was resistance under the right rectus midway between the umbilicus and pubes, and dulness on percussion. The abdomen was generally tender, but especially at the dull area. Under chloroform the diagnosis was no clearer. Per rectum the bowel was empty as far as the sigmoid flexure. Nothing like a tumour was to be made out anywhere. In spite of this the signs pointed to intussusception; so, letting the child get over the chloroform first, I injected a pint of water with a Higginson's enema syringe through a No. 8 catheter passed well into the rectum, and at the second attempt the water was retained. Dissolved in it was a little boracic acid, as the discharges smelt very foul. After injecting slowly about sixteen ounces the child suddenly stopped crying and appeared to watch attentively the sensations it was experiencing in its abdomen, and the expression became relieved. I injected about four ounces more to make sure of the reduction. The blood-flow ceased at once. The vomiting went on for twenty-four hours longer, the temperature rising to 101·2° F., but most of this disturbance was accounted for by the child being in the act of cutting its teeth. It made a rapid and perfect recovery.

These cases appear to illustrate the ease with which intussusception can be managed if diagnosis is early and treatment prompt. A consideration of the mechanical problems involved in the process of reduction of an intussusception seems to show the following results. If we take the invaginated portion as wedge-shaped, it is evident that the base of the wedge may be considered as pointing upwards in the direction of the stomach or downwards towards the rectum, according as the invaginated part is swollen sufficiently to dilate the intestine outside it, or as it is smaller than its own neck where the compression takes place. If the wedge's base be directed downwards, then, since the intestine is fully dilated, and since a force applied to a mass of liquid under such circumstances acts equally in all directions, then a considerable part of the forces which act on the sides of the wedge tends to drive it downwards. This resultant will, at any rate, tend to retard, and to a considerable degree, the reduction of the bowel. If, on the other hand, we have previously emptied the œdematous parts by pressure, either from within or from without, then we have the wedge's base directed upwards, and all the force applied at the rectum end tends to drive the invaginated bowel in the desired direction. As regards the other forces called into play, I think we need only consider that one which acts at the neck of the invagination in an upward direction, and half of whose power acting on the outer intestinal wall is at once lost; and that one which dilates the intestine. The former it is unnecessary to consider further; the latter, brought into play as it is on the same principle as is employed in a Bramah's press, may be enormous, and quite capable of rupturing the intestine if not kept carefully under proper control.

Queen's-crescent, Haverstock-hill.

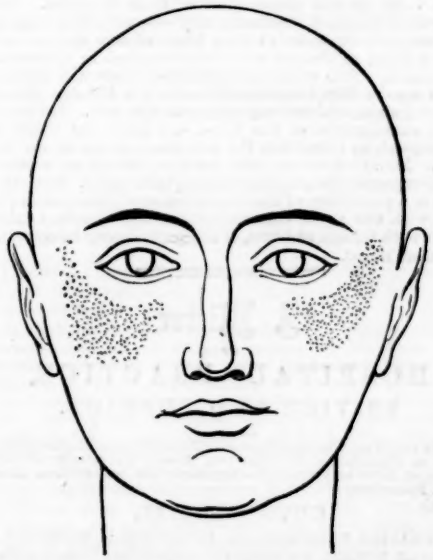
SYMMETRICALLY GROUPED COMEDONES.

BY H. RADCLIFFE-CROCKER, M.D.,
PHYSICIAN TO THE SKIN DEPARTMENT OF UNIVERSITY COLLEGE HOSPITAL, AND PHYSICIAN TO THE EAST LONDON HOSPITAL FOR CHILDREN.

DR. THIN'S interesting communication on "Grouped Comedones" in adults, in THE LANCET of Oct. 13th, recalled to my mind a case that occurred in my practice.

A lady, aged about thirty-five years, who had previously been treated by me for acne rosacea and atonic dyspepsia, came in June, 1886, with a precisely similar condition to that described by Dr. Thin, limited to the cheeks as in the accompanying diagram. The comedones were very minute,

FIG. 1.



closely set, giving a dirty appearance to the skin, and she stated that the affection had been present about a fortnight, dating from one morning, when she noticed that her cheeks were rough and slightly swollen, which a day or two later acquired the dirty aspect. (Fig. 1.) The affection was soon cured with a similar treatment, but somewhat milder than that recommended by Dr. Thin; the part was rubbed every night with a piece of moist flannel and "mouilla" soap, a liquid glycerine soap less irritating than soft soap.

In comparing the diagram of this case with that of Dr. Thin's, one cannot but notice the similar distribution on the cheeks and the symmetry of the affection in both. I am inclined to lay much more stress on this symmetry than Dr. Thin appears to do, for, though it is not absolute in all parts, it is sufficiently striking, and points to an internal origin; and, if this be so, it places these cases in a different category *quâ* etiology from the cases of grouped comedones in children which I described four years ago. In children, there is strong reason to believe that the comedones are of local origin, probably bacterial, and possibly to be ascribed to the dirty caps or similar sources of infection, or, at all events, due to a local irritant. Although Dr. Thin has met with three cases, I cannot help thinking that the affection of "symmetrically grouped comedones" is a rare one, as it is too striking to be overlooked; and, in addition to the one mentioned, I am sure I have only seen one other case, a boy ten years old, in the East London Hospital for Children, suffering from general tuberculosis, who had a group on each cheek immediately in front of the ear. On the other hand, irregularly grouped comedones in children are now fairly common, and, as mentioned in my work on "Diseases of the Skin," I have once seen a similar condition on the abdomen of an old man

Since the above was written another case has come under my notice—a lady, aged thirty-one, who suffered at times from dyspepsia, of which the prominent symptoms were flatulence and flushing after meals. Her first attack of this unpleasant affection was when she was abroad in the spring, when her digestion was upset by the foreign mode of living. After her general health had improved, she got rid of the comedones, but in August last they appeared, under similar circumstances, as badly as ever. The distribution is delineated in Fig. 2, and this, I think, throws some light on the distribution in the lower part of the face in Dr. Thin's case, in which the two small groups are imperfect developments of the larger groups round the mouth in my case; and, although in neither his case nor mine is the symmetry exact, the difference is not greater than it is in a large number of admittedly symmetrical affections. Now, the areas of the cheek

FIG. 2.

patches, both in Dr. Thin's and my Fig. 1, correspond to a frequent distribution of various skin eruptions—e.g., lupus erythematosus, many cases of eczema, &c. This localisation depends, doubtless, on an anatomical arrangement, probably of the vascular distribution under some nerve domain. I do not mean to imply that the disease is of nerve origin, but that the distribution is determined by a definite vascular area. The causes of this curious outbreak of comedones cannot be certainly determined until more facts are recorded, but my cases suggest that digestive derangements play an important part in the etiology.

The cases of two brothers, recorded by Mr. Verrall in THE LANCET of Oct. 20th, are an additional fact in favour of local contagion in "comedones in children."

Harley-street, W.

A CASE OF SPORADIC SCARLET FEVER, ORIGINATING *DE NOVO*.

BY SURGEON-MAJOR R. D. MURRAY, M.B.,
OFFICIATING CIVIL SURGEON OF CHUMPARUN, BENGAL.

CASES of scarlet fever are so extremely rare in India that the publication of the following case may be of interest, especially in connexion with the much-disputed point of its etiology. Chevers, in his last work ("A Commentary on the Diseases of India"), writes: "I never saw any form of scarlatina in Lower Bengal, or any disease which could be fairly mistaken for it; neither has any medical man with whom I have discussed the subject met with a genuine and

unmistakable case in that great province. Writing in 1864, Dr. Peet, who had great experience in the Bombay Presidency, said: 'Scarlet fever is altogether unknown in Western India.'" Deputy Surgeon-General G. Mackay, an officer of large experience, who spent all his service in the Madras Presidency and was for several years civil surgeon of Ootacamund, never saw a case of the disease in India. A few cases have been reported from time to time as having occurred at military stations in the families of soldiers recently arrived from England—imported cases. One case was reported by Dr. Maunsell in 1870, at Simla, in the person of a young officer of artillery; and another case by Dr. A. Garden, in 1869, at Saharanpore, which he regarded as doubtful, and called "erythema scarlatiniforme." Chevers, again, says: "The facts and arguments adduced by Staff Surgeon Bradshaw and others fail to convince me that scarlatina has ever been known to originate *de novo* in India. But since he, Dr. Garden, and Dr. R. D. Murray consider that they have seen it so originate there, all practitioners have doubtless remained on the watch for its appearance." In the *Indian Medical Gazette* for May, 1876, I published an account of three cases which occurred in Calcutta shortly before, and to which Dr. Chevers alludes above. They were country-born children of European parentage and of the same family, and were admitted to the General Hospital, where I was attached for general study on first arrival in the country. The cases excited much interest among the hospital staff. They were first supposed to be dengue, as scarlet fever was said to be unknown in India; but their true nature speedily declared itself, and Drs. Ewart and Raye both agreed with me in pronouncing them to be genuine cases of scarlet fever, although neither of them had ever before seen a case in India. One was a case of scarlatina maligna, and proved rapidly fatal, with sloughing of the throat. The disease did not spread in the hospital, and no more cases were heard of in Calcutta.

On April 20th last I received a telegram from Mr. G. C——, indigo planter at P——, in the north of this district, and about fifty miles off, to go and see his wife, who had been attacked with "scarlet fever." On my arrival the same evening, and fully expecting to find a case of measles, bad prickly heat, erythema, or some of the other nondescript rashes so common in this country, my scepticism was at once disarmed by finding, to my surprise, that Mr. G. C——'s diagnosis (made from a careful study of "Moore's Family Medicine") was quite correct. Mrs. G. C—— is a young lady of remarkably strong constitution, but has suffered much from malarious fever since going to P—— about two years ago. It is a notoriously malarious locality in the sub-Himalayan tract, and very lonely and isolated. The patient arrived from England about six years ago, and has not been home since. On April 18th she had a rigor, preceded by malaise, and followed by strong fever, loss of appetite, headache, sore throat, &c. On the 19th the fever continued, and on the 20th the characteristic scarlet-fever rash made its appearance on the face, trunk, and extremities. It was especially marked on the chest and legs. She is naturally very fair skinned. On getting up on the morning of the 20th and looking at herself in the glass, she was "horrified" to find herself "all scarlet." There was the strawberry tongue very well marked, and likewise the sore throat, which was the only symptom that caused her much uneasiness. There was the usual congestion of the fauces, with enlargement of the tonsils and difficulty in swallowing. When I arrived in the evening the temperature was 103° F. and the pulse 120; she said the pulse was much higher the previous day. On the morning of the 21st she was feeling better, the temperature and pulse having fallen to 101·2° and 92 respectively. The bowels were regular, and menstruation was going on. The subsequent history of the case is one of uninterrupted convalescence and *desquamation of the entire cuticle*, which was not completed till the lapse of six weeks. The cuticle of the heels was very persistent, and had to be softened with poultices before it could be removed. The urine was not examined, but there was throughout no appearance of dropsy or even œdema. Albuminuria and nephritis occur in about 13 per cent. only of cases of scarlet fever.

So far, the case was a typical one of scarlatina of a mild type. The only European inmates of the house besides the patient were her husband and child, but neither of them contracted the infection. Directly the disease was identified, the child, aged two years, was isolated in another part of the house, and sent away the following day to a friend's, some twelve miles off. Mr. G. C—— remained with his wife till she was well. Neither of them had had scarlet fever. The house remained in quarantine until the completion of desquamation on June 1st, and then it was thoroughly fumigated and disinfected. The patient was not allowed to write letters for fear of transmitting infection. There have been no more cases in the vicinity, and none of the native servants were attacked. In fact, there is no record of an authentic case occurring in a native of India.

The above case is one of more than ordinary interest and importance in these days of bacteriology. Here we have an unequivocal instance of the disease occurring sporadically and originating *de novo*. It would appear to be a refutation of the theory of the bacillary origin of the disease. I say so in no carping spirit, for I have the very highest admiration for the important and brilliant researches of Klein, Edington, and Jamieson, to whom a knowledge of the case may possibly be of some value in the prosecution of their inquiries. The cows which supplied the family at P—— with milk were all very carefully examined, but no trace of any disease such as that found at Hendon could be discovered in their teats and udders. This would seem to corroborate the position taken up by Mr. Crookshank as to the Hendon disease being vaccinia, and not scarlatina, in the cow. No microscopic examination of the blood was made for bacilli or streptococci, as I had not the necessary lenses at my disposal. Mrs. G. C—— assured me that she had not received letters or parcels from infected houses in England. Nowadays there is a possibility of the transmission of infection in this way, with our rapid communications and frequent intercourse with friends at home, if the germ theory be correct.

Motihari, Bengal.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

SUPPURATING BUBONOCELE; OPERATION; RECOVERY.—SEVERE BURNS; NECROSIS OF ASCENDING RAMUS AND CONDYLE OF JAW; SEQUESTROTOMY; RECOVERY.

(Under the care of Mr. BRYANT.)

IN the first of the following cases the surgeon was guided to a diagnosis by the history, the local signs and general state pointing more to simple abscess than to the condition found at the operation. How far the taxis may have helped to produce the suppuration it is difficult to say, and the account throws no light on this point. The attachment of the omentum to the internal ring was not disturbed, so the peritoneal cavity was not open to the entrance of septic material. The chief interest in the second case consists in the formation of a sequestrum involving the parts described, there being apparently no sufficient reason for such necrosis, and in the complete mobility of the lower jaw which followed the removal of the diseased bone. Mr. Bryant refers in the last edition of his work on Surgery (vol. i., p. 618) to two other cases of a similar kind, in both of which an equally good result followed removal of the condyle and ascending ramus of the jaw. The account of the progress of the burn under treatment, including the frequent recourse to skin grafting, and the result effected by it, will also be noted.

Irreducible suppurating bubonocele; exploration; removal of suppurating omentum; recovery. (From notes by Mr. Tressider and Mr. Clowes.)—L. S——, aged twenty, was admitted under the care of Mr. Bryant on Dec. 22nd, 1887, and was discharged on Feb. 11th, 1888. About ten days previously to admission the patient found a small swelling in the left groin, not painful until six days before, when he had a dull, heavy sort of pain there. His bowels were very constipated. He took pills on two

occasions, which relieved his bowels four times in the ten days. Two days afterwards he saw a surgeon, who advised him to come into the hospital. He had had the taxis freely applied before admission.

On admission the patient had a small hard swelling in the left groin, which was irreducible, and gave no impulse on coughing. It was not very painful. He felt sick, but had not vomited. His bowels had not been opened for three days. Swelling dull on percussion. It was regarded as an irreducible omental hernia, and next day Mr. Bryant operated under an anæsthetic. An incision three inches long was made over the swelling, in the direction of Poupart's ligament. When the skin and tissues were cut through, pus escaped, and a piece of suppurating omentum was seen. An aneurysm needle was passed through the upper parts of the omentum, and it was ligatured with catgut and cut off. The superficial epigastric artery was the only one that had to be twisted. The wound was then plugged with iodoform gauze and left to granulate up.

Dec. 24th.—Was ordered a simple enema; a draught containing twenty grains of bromide of potassium and a drachm of syrup of chloral in an ounce of water; milk and beef-tea.

25th.—The draught was repeated.

30th.—Wound dressed. Healthy granulations appearing.

Jan. 2nd.—Temperature normal; 100·8° on the previous evening.

3rd.—Temperature normal. Bowels open after enema.

15th.—Temperature 102·6°; 102·0° on the previous evening. Wound opened, as there was pus under the upper edge of the wound. Quinine ordered.

16th.—Bowels opened after enema. Temperature on the previous evening 104°; at 4 A.M. this morning it dropped to 101°.

The wound gradually closed, and on Feb. 2nd he got up. He left the hospital on the 11th, wearing a truss. In October he was quite well.

Extensive burn of left arm and thigh; alveolar abscess; necrosis; removal of the left condyle of the lower jaw; complete movement. (From notes by Messrs. Deane and Nisbet).—E. K——, aged forty, a hop-packer, was admitted on Dec. 27th, 1885, and was discharged on May 17th, 1886. Readmitted on June 22nd, 1886; discharged on July 3rd, 1886. Third admission on Sept. 20th, 1886; discharged on Jan. 18th, 1887. Family history good. No serious illnesses before admission. The history of his present trouble was that on Dec. 26th, 1885, about 3 A.M., he was asleep in front of the fire on a chair, when he fell into the fire, and burnt his left arm from the shoulder to the wrist. He also burnt his left thigh in two places.

Condition on admission.—There was a small burn on the left scapula near the axillary process; another burn extended along the outer and posterior region of the arm; passing over the elbow, it extended to the back and outer border of the forearm nearly to the wrist. There was a good deal of sloughing in the wounds; they were also very foul. The burns on the buttock and thigh consisted of two large ones, circular in shape; there were also smaller patches of burns here and there, all very sloughy. They were dressed with boracic acid and vaseline ointment.

Jan. 5th, 1886.—Patient complained only of pain in the buttock; the dressings were changed to iodoform and vaseline.

7th.—The burns looked healthier. Sloughing and foulness of wounds were nearly all gone. The burns did not extend down to the muscle. Granulations were springing up profusely.

12th.—About twenty-five grafts were put on the burns on the arm.

13th.—More grafts were put on the arm to-day from the prepuce. Wound healthy.

19th.—The patient had a tooth extracted.

Feb. 1st.—The skin-grafting was continued. Some pieces had taken and were growing. The patient got up for an hour the previous evening.

8th.—About fifty pieces of skin were grafted on to the leg. Wounds looked healthy.

15th.—The patient had slight hæmorrhage with his stools on Sunday, so he was put on farinaceous diet. Some of the pieces of skin did not appear to take. Some fresh pieces were put on.

20th.—An abscess formed in the mouth; it was opened from the outside of the cheek. A good deal of discharge came away. Burns healing up gradually.

28th.—The abscess was still discharging. The burns on the leg and arm were dressed every other day. They were healing gradually.

March 5th.—There was still a small amount of discharge from the abscess. The burns were doing well.

11th.—Ordered subnitrate of bismuth powder as an application to the arm.

27th.—Two large skin grafts were applied to two of the wounds on the leg. The patient seemed about the same.

April 4th.—The dressing with bismuth was discontinued, as it did no good. The wounds were healing very slowly.

May 8th.—The wounds on the arm and leg were now healing up, the granulations looking healthy. The swelling on the face was about the same size, and there was a small amount of discharge from it. The temperature varied a good deal.

11th.—Chloroform was administered, but, the patient being troublesome and the pulse becoming weak, ether was substituted. Several small pieces of necrosed bone were taken away from the left alveolar process, but the mass of bare bone felt, not being loose, was not taken away. On putting the finger along the internal part of the lower jaw, it was found to be hard and swollen.

17th.—The patient left the hospital; he went to a convalescent home for a month or more, by which time it was hoped that the bone of the lower jaw would be fit for removal. The wounds on the arm and leg were nearly healed, and there was only a slight discharge from the wound on the face.

On June 22nd the patient was readmitted for disease of the lower jaw. His face was much swollen on the left side, from the lower border of the jaw to the zygoma. Just below and behind the angle of the jaw there was a discharging sinus; and inside the mouth, immediately behind the last tooth, there was a second opening, which appeared to be continuous with the one outside. A good deal of fetid discharge came from the external opening. The patient looked better than he did a few weeks previously, but still he did not seem healthy.

On June 25th the patient was placed under chloroform, which he did not take well, becoming very blue, chiefly from persistently holding his breath. The anæsthesia was completed with ether. A probe was passed into the external opening of the sinus in the left jaw, but nothing definite could be determined. The opening was enlarged, and, on inserting the finger, dead bone forming the angle and part of the ramus of the inferior maxilla was felt. On introducing the forefinger of the other hand into the mouth, it was found that the exploration of the external opening had not caused any bleeding into the mouth, and on manipulation with the two fingers, one in the external opening and one in the mouth, it was found that the whole jaw moved together, the necrosed bone not being at all loose yet. The wound was dressed with iodoform gauze and a lead bandage. The patient recovered quickly from the anæsthetic. He complained of great pain in his two back teeth.

July 1st.—The wound has been dressed daily since the operation. A fair amount of discharge came from it. The patient complained of pain in his jaw and teeth, with some headache.

On July 3rd the patient left the hospital.

On Sept. 20th the patient was readmitted. He had a very large swelling, hard to the touch, on the left side of the face. He complained of pain at the angle of the jaw, where there was a discharging wound. He felt a sort of crackling at the joint when he moved his jaw, as in eating. There had been the same pain and discharge all the time he had been out. He had dressed the wound himself.

Oct. 5th.—The patient was put under chloroform, and Mr. Bryant operated. The wound at the angle of the jaw was enlarged by making an incision upwards. On probing, no loose bone was felt, but a long sinus was found running up to the condyle; through this the forceps was introduced, and the whole of the condyle of the jaw bone with its neck was removed. The patient took chloroform very badly, as he had done on the two previous occasions. Some little alarm was felt, as he once stopped breathing. It was a long time before he was properly under its influence. He did not vomit.

8th.—Good deal of discharge; not quite sweet. Temperature rose to 102·6° last night.

20th.—Almost the whole of the side of the face is still much swollen; it seems to consist of a bony growth. The measurement over the front of the top of the head and under

the chin (round the largest part of the swelling) is twenty-four inches. Temperature normal.

29th.—The temperature has been gradually rising. The swelling is perhaps rather less in the front, but the patient complains of pain, and there is perhaps slight fluctuation to be felt. Not much discharge. A probe seems to run upwards and forwards somewhere behind the jaw.

Nov. 7th.—Pus was let out by an incision just over the zygoma.

15th.—There is still some discharge. The probe passes in about two inches in a direction almost directly inwards.

29th.—A probe passes in two inches, inwards, upwards, and backwards; no bare bone can be felt. Discharge less; lower original wound quite healed. In the afternoon the patient complained of a headache and being unwell, so he went to bed. Temperature 101·8°; later in the evening, 102°. 30th.—Temperature normal.

Dec. 2nd.—The patient was up to-day. Some dead bone was felt on probing the lower sinus.

19th.—To-day an incision was made behind and below the left ear, and pus evacuated.

21st.—Patient still complains of pain about his left ear, and there is a little fluctuation in front of the last incision, from which there is some discharge. There does not appear to be any communication between the last incision and the old sinus as far as one can tell with probing.

Jan. 11th, 1887.—Two small pieces of dead bone came away from the anterior opening.

15th.—No discharge. The sinuses have closed; dressing left off. There is good movement of the lower jaw.

WEST HERTS INFIRMARY.

CASE OF URETHRAL STRICTURE.[1]

(Under the care of Mr. F. C. FISHER.)

Stricture of the urethra, with perineal fistulæ, treated by external and internal urethrotomy.—H. W——, aged forty-eight, a bleacher and dyer, was admitted on Sept. 10th, 1885. He had suffered from gonorrhœa when young, and also from stricture for a "length of time," but could not give any dates. He was very emaciated and cachectic-looking. Three fistulæ were present in the perineum, which was tender and boggy. It was decided not to touch the urethra for a day or two. He was given a saline purge, and acetate of potash, tincture of hyoscyamus, and infusion of buchu in a mixture.

Sept. 17.—A No. 2 English gum-elastic catheter could not be passed. The perineum was poulticed, as there were signs of a fresh abscess forming. Tongue dirty.

18th.—Feels very weak, and had a doubtful rigor.

22nd.—Ether was given, and Mr. Fisher performed perineal section without a staff. The perineal tissues were quite disorganised by suppuration. A No. 12 catheter was passed into the bladder by the perineum and tied in. Evening temperature 98·4°. Twenty minims of liquor opii sedativus were given at night.

23rd.—Had a good night. The operation had given much relief. Evening temperature 100·6°. The liquor opii sedativus was repeated.

24th.—Morning temperature 100·6°; evening 101·4°. A fresh tube was introduced with indiarubber tubing attached, and the urine drained off at the foot of the bed.

On Sept. 27th the morning temperature was 100·8°, and evening 98°. From this time his temperature remained normal, and he rapidly gained flesh, and expressed himself as feeling more comfortable than he had done for a long time. An abscess afterwards developed about the right external abdominal ring. It was poulticed, and on Nov. 11th was opened. A probe passed easily down the outside of the pelvis, but could not be made to appear in the perineal wound.

Nov. 19th.—A fresh tube was put into the bladder. Pus came from both wounds. The abdominal wound rapidly closed.

23rd.—A No. 5 gum-elastic catheter was passed per urethram into the bladder, which was now washed out with a weak solution of quinine and acid.

On Dec. 5th, ether having been administered, Mr. Fisher performed internal urethrotomy with Maisonneuve's urethrotome. A full-sized staff (No. 12) was then passed into the bladder, and the perineal wound, which had closed a good deal, was enlarged and a drainage tube inserted. A No. 12 silver catheter was afterwards passed daily through the stricture to meet the perineal tube, and the urethra syringed out with a weak disinfectant. No urethral fever ensued. The man made an uninterrupted recovery, and on Dec. 24th was discharged, being able to pass a No. 12 catheter for himself, and with the perineal wound soundly healed. He passed the catheter twice a week for one month, then once a week, and afterwards once a month. He was then ordered to do without it for six months, and then report himself. This he did on Jan. 6th, 1887, and as a No. 12 silver catheter passed easily he was sent away for one year. When seen in Jan. 1888, the same-sized catheter passed easily, as it did also in the following October.

Remarks by Mr. FISHER.—It was owing to some stricture cases published by Mr. Reginald Harrison that I was led to use this combined operation of internal and external urethrotomy, and to him I am exceedingly grateful. The object of his paper was to show, in his opinion, how urethral fever might be avoided in cutting operations affecting the urethra. His idea was that urethral fever was caused by the septic urine passing over the freshly cut urethra; remove this and urethral fever ought not to ensue. Accordingly, having performed internal urethrotomy, he passed a large staff, and made a perineal puncture and freely drained the bladder with a tube about the size of the little finger. He found in all his cases that there was not any urethral fever; and more than this, the new urethral splice did not seem to have that characteristic of contraction which urethral wounds when bathed in urine seem to have. The urethrotome makes a V-shaped gutter, and the edges are kept apart by daily catheterisation for about ten days, and cleansed with a disinfectant. I inferred from Mr. Harrison's paper that he had hopes of a permanent cure by the method, and not only continual alleviation, such as is produced by ordinary methods. In my own case, the urethra was impervious to instruments—a rare condition,—so I merely drained the bladder by the perineum, and waited until the man had recovered his health. The rest to the urethra was very beneficial, so that ultimately a No. 5 catheter was passed. The stricture now, three years after the last operation, and of which there has been practically no treatment, shows no sign of recurrence. I think this seems to bear out Mr. Harrison's opinion that there is a fair chance of having produced a permanent cure. I do not intend losing sight of the man.

[1] Abstracted from a paper read before the West Herts Medical Society on Oct. 1st, 1888.

WORCESTER GENERAL INFIRMARY.

A CASE OF RECURRENT FIBRO-SARCOMA OF THE THIGH, WEIGHING TWELVE AND A HALF POUNDS; SUCCESSFUL AMPUTATION THROUGH THE TROCHANTERS.

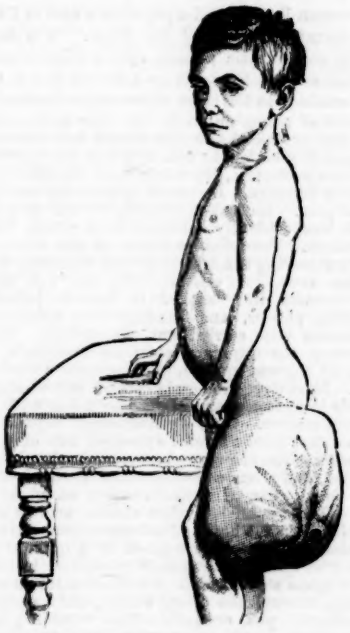
(Under the care of Mr. HYDE.)

FOR the account of this case we are indebted to Mr. T. P. Gostling.

F. C——, aged seven, was admitted on Sept. 7th, 1887. When one year and a half old a tumour was noticed growing in the centre of the posterior surface of the left thigh. This was removed by Mr. Hyde in 1882, and was found to be not adherent to the bone. No microscopical examination of the tumour was made. The parents stated that soon after the wound had healed a fresh tumour appeared in the same situation, and it continued to increase in size until the date of readmission to the infirmary.

Condition on admission.—The patient is 43½ in. high, thin, fair, and of slender build. He weighs 3st. 10lb. without his clothes. There is no complaint of any pain, but the boy suffers from evident inconvenience in walking, and running is an impossibility. When standing, the internal malleoli are 4 in. apart, although with an effort he can bring them together. The left hip and knee are constantly kept slightly flexed, and most of the weight of the body falls on the right leg, although he can stand alone on either. He walks a little lamely, and moves his left foot in a semicircle. The left hip cannot be fully flexed owing to the tension of the hamstring, but it can be fully extended. The left knee can only be flexed to a right angle, as it then comes in contact with the lower edge of the tumour, but it can be fully extended. From the left thigh a large tumour projects backwards and to each side, but the growth does not project forwards. The skin over

this growth is everywhere smooth and tense, and numerous large veins are seen through it, especially on the posterior aspect. On this side there is, a little to the outer side of the middle line of the growth, a scar about four inches long running from above down, and in the centre of this scar there is an eczematous patch about the size of a shilling. The hamstring muscles, sartorius and rectus, can be easily traced over the surface of the limb and tumour. The tumour itself is everywhere elastic, but does not fluctuate in any situation. It appears to be firmly attached to the posterior surface of the femur, but the front and sides of that bone can be easily made out. The swelling itself is not pulsatile, but pulsation can be felt on its side in the line of the femoral vessels. In its greatest circumference, 3¼ in. above the upper margin of the patella, the tumour measures 29½ in. The greatest length, in a line from the cleft between the buttocks to the centre of the popliteal space, is 10 in.; the greatest breadth, 3¼ in. above the upper margin of the patella, is 8½ in. Viewed from the front, the tumour projects from the middle line of the femur—to the right 5 in., and to the left 3½ in. (See engraving). Viewed from



behind, only a strip of the right thigh, 1¼ in. wide, can be seen, the upper border of the tumour reaching half-way across the right buttock. The abdominal and thoracic organs were healthy.

Operation.—On Sept. 13th, 1887, the patient being under the influence of chloroform, two ounces of brandy in warm water were injected into the rectum, and the limb, being held at right angles to the body, the posterior flap was formed by dissection at first, only skin and fat being taken, and the base of the flap being thickened by muscle. The limb was then extended, and the anterior flap formed in the same manner, care being taken to cut the great vessels last. The flaps were both made by cutting from right to left, and were of the same size, and the angle of the wound occupied the same situation as in an amputation by transfixion at the hip joint. The bone was cut through at the middle of the great trochanter. Digital compression was relied on throughout to control the bleeding. The wound was closed with silver sutures, drained from each end, and dressed antiseptically.

The next morning (Sept. 14th) the temperature rose to 102·6°, and the stump was found to be distended with blood clot, but after this date the temperature gradually came down to normal. Unfortunately only the inner third of the wound healed by first intention, and on Sept. 18th the end of the bone protruded, but by careful strapping the ends of the flap were kept in fairly good position, so that on Sept. 24th the situation of the wound was occupied by a level granulating surface. On this date the patient was sitting up in bed, and he left the infirmary on Nov. 12th, walking on crutches, with the stump perfectly healed. On Sept. 20th, 1888, a year after the operation there was no sign of recurrence.

Description of the part removed.—The skin being reflected by a longitudinal incision, it was found that the muscles, vessels, and the great sciatic nerve were spread out over the surface of the tumour, being only connected to it by some loose connective tissue. The limb was lifted up at this time and the tumour dropped clean away from the bone, not being adherent to it in any situation. On section, the growth was found to consist of distinct lobes divided by septa of rather loose connective tissue. The lobes being again divided by fibrous trabeculæ, which branched in all directions, the spaces between them being occupied by greasy-looking, yellow material. The surface of the tumour did not "cup," and it felt very firm and hard against the knife. The growth contained no vessels visible to the naked eye. Microscopically, it was found to consist mainly of masses of fat separated from each other by strands of connective tissue, containing a large number of small spindle-shaped cells. The limb weighed 5 lb. and the tumour 12½ lb., making together 17½ lb., being just over one-third of the weight of the whole patient.

Remarks by Mr. HYDE.—The extraordinary size of the tumour and the rapidity of its growth are somewhat remarkable, while the recovery of the patient after the loss of a limb weighing just over one-third of his entire weight is also worthy of record. Digital compression was relied on for the control of hæmorrhage, as I considered it in this case the best and safest, the situation of the tumour rendering the elastic tourniquet inapplicable. The size and seat of the tumour prevented amputation by transfixion, and I therefore decided to take skin flaps from the surface of the tumour. The amputation was done through the trochanters, as giving a better prospect of recovery than disarticulation at the hip joint. Had any sign of disease of the bone been found, I should have removed the head of the bone.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

The Mortality of Abdominal Section.

THE first ordinary meeting of this Society for the present session was held on Oct. 23rd, Sir E. Sieveking, President, in the chair.

Mr. W. A. MEREDITH read a paper entitled "Remarks on some points affecting the Mortality of Abdominal Section, with Tables of Cases," of which the following is an abstract. The purpose of the paper was to draw attention to certain points affecting the present death-rate after abdominal section, and with this view operations for ovarian growths were chosen as being to some extent representative of the entire subject under consideration. As a basis for the inquiry, the results of the author's own work in this connexion, amounting to 126 operations, were examined with regard to the chief causes influencing the mortality, special reference being made to the ten deaths which occurred in the series of 104 completed ovariotomies. All the operations were performed with strict antiseptic precautions, including the use of the carbolised spray. He was now less inclined than formerly to look upon the latter as an absolute essential to the safeguards of antiseptic abdominal surgery, but he still considered it valuable as the most convenient and effectual means of antiseptic irrigation at our disposal when dealing with the peritoneal cavity. Both ovaries were removed in seventeen cases, two of which terminated fatally, but in neither instance was the result in any way attributable to the removal of the second ovary. Complete enucleation was performed in five cases, all successful, the resulting rent in the broad ligament being closed by means of a continuous silk suture. He advocated the use of the drainage tube in all cases of ruptured or inflamed cysts, in any case where irritating or septic fluid had escaped into the peritoneum, in all operations com-

plicated by serious injury to bowel or urinary bladder, in every instance where washing out had been resorted to, and in all cases of severe operation in middle-aged or elderly women. For washing out the peritoneum, where necessary, he advocated the use of plain, recently boiled water, cooled as required by the addition of a saturated solution of boric acid. Discussing the mortality, he was inclined to believe that in large series of cases the average death-rate would never be less than 5 or 6 per cent. Of the ten deaths in his series two were from septicæmia, one from intestinal obstruction, one from hæmorrhage, one from dysenteric diarrhœa, two from chest complications, and three from exhaustion; three of these deaths were from preventable causes. Twelve successful operations for the removal of diseased uterine appendages were next reviewed. In seven patients, in whom both appendages were removed, complete arrest of menstruation followed. He had found that in cases of chronic ovarian mischief about 90 per cent. were the subjects of obstinate constipation, and in them tonic purgative treatment, by lessening pelvic congestion and preventing the formation of scybala, was followed by marked relief of symptoms. Included in a series of ten exploratory operations were two incomplete ovariotomies. Both patients had been tapped, and the death of one was directly due to the difficulties encountered in the attempt to separate universal adhesions which had resulted from this treatment. In conclusion, it was shown that the increased success of abdominal section for ovarian disease during the past ten years was chiefly attributable to the diminution in the number of deaths from septicæmia. For purposes of comparison he took three successive groups of operations, which represented three separate periods during the last twelve years, and gave their average death-rate from septicæmia alone. In 100 consecutive cases taken from Sir Spencer Wells's work, when the clamp was used and before the employment of antiseptics, the mortality was ten, or one to every ten patients. In 150 cases recorded by Mr. Thornton in the sixty-fourth volume of the Medical and Chirurgical Transactions, which were treated antiseptically and with intra-peritoneal ligature of the pedicle, there were five deaths, or one to every thirty patients. In his own series of 104 cases there were two deaths, or one to every fifty-two patients. The chief factors which had contributed to this increased success, he thought, were as follows:—(1) The general adoption of the intra-peritoneal treatment of the ovarian pedicle; (2) the application of the antiseptic system to abdominal surgery; (3) the gradual abandonment of the practice of tapping abdominal cysts; (4) the increase in our knowledge respecting the proper use and management of the drainage tube; (5) the recent introduction of the plan of freely washing out the peritoneal cavity in cases complicated by the extravasation of blood or other fluid.—Mr. ALBAN DORAN had seen great advantages follow both the antiseptic and the non-antiseptic systems of treatment. He thus summed up the influences which he thought contributed to lessening the mortality after ovariotomy: The skill and experience of the operator; early operation; a good hospital and efficient nurses, amongst the latter emulation being a great factor in favour of good results; the use of antiseptics, not only for their own value, but because they drilled the operator into habits of forethought; drainage, when the tube was frequently pumped out; and gently flushing the peritoneum with a great bulk of warm fluid, which checked hæmorrhage, washed out clots, and prevented shock by keeping the peritoneum warm. He condemned the use of a ward nail-brush, which he believed to be a frequent carrier of infection.—Mr. KNOWSLEY THORNTON objected to stitching up the rent in the peritoneal capsule after enucleation. A number of small vessels were torn; hæmorrhage or serous effusion might occur into the sac, which led to tension, nerve disturbance, inflammation, and suppuration. If the rent were left open the case did much better, as the fluid flowed into the peritoneum and was rapidly absorbed. Tapping of cysts should not be resorted to, the escape of fluid in some cases leading to infection of the peritoneum. Ruptured cysts rarely needed drainage if carefully sponged out. He thought that flushing often acted by breaking up septic material into tiny particles, which were unable to defend themselves against the power of the peritoneum. He maintained that efficiently performed oöphorectomies always stopped menstruation. In cases of ovarian disease it was only necessary to remove the troubled ovary or tube—not both. It was sufficient to empty the drainage tube once in twelve hours under the antiseptic method, but to do so every hour was not too often where no antiseptic was used.—Mr. MEREDITH replied that he did not consider the opening made in the broad ligament to enucleate a cyst was comparable with the peritoneal wound made in the removal of a kidney. Women at the menopause were passing through a critical time, when kidney trouble often developed, which would hinder ready absorption of peritoneal fluid; he was therefore inclined to extend the advantage of drainage to them. Flushing out the peritoneum not only checked hæmorrhage, but also avoided the undue irritation of the membrane caused by excessive sponging.

MEDICAL SOCIETY OF LONDON.

Lacerated Wound of Brain.—Removal of Aural Exostosis.—Method of Raising the Epiglottis.

AN ordinary meeting of this Society was held on Oct. 22nd, Mr. J. Knowsley Thornton, M.C., Vice-President, in the chair.

Dr. FLETCHER BEACH read a paper on a case of Recovery from a Lacerated Wound of the Brain. The boy was attacked by an epileptic patient with a window pole, the end of which entered the brain two inches and a quarter above and one inch to the right of the occipital protuberance to the extent of about an inch. He was quite conscious when seen and explained how the wound had occurred. A pad of boracic lint soaked in Boracic lotion was applied, and over this some protective, the whole being secured by some plaster and a bandage. He passed a quiet day and did not complain of pain. He took milk well, but was sick once or twice. He was evidently suffering from shock, but was quite conscious. Temperature taken in the evening was 100° F. On removing the dressings next morning, a hernia cerebri was seen. A central hole was cut in some layers of boracic lint, soaked in boracic lotion, and the protective, plaster, and bandage were again applied. This treatment was carried out throughout. He was restless during the day, and complained of pain in his head. An ice-bag was applied, and the milk with ice was continued. Next day, the hernia cerebri had disappeared, and the hole in the scalp and skull was filled with blood-stained brain matter. On July 27th, eight days after the accident, another hernia cerebri appeared, but disappeared two days after. He was very abusive while the wound was being dressed, and often called out and shouted, due, no doubt, to meningitis. He was restless at night up to Aug. 6th. The wound had then closed, and he did not complain of pain in the head. The temperature was normal, but the pulse was 104. He remained in a quiet condition up to Aug. 8th, when the temperature went up to 100°, and restlessness again was noticed. On August 16th a cerebral abscess broke through the closed wound, and a quantity of greenish-coloured pus escaped. The wound gradually closed up again, and on August 19th the boy was in a quiet condition and his temperature normal. An abscess in the left thigh appeared on Sept. 1st, discharged on the 5th, and on the 30th the boy was up and about the ward. Two things were noticeable in this case: first, there was no paralysis, because the motor parts of the brain were not involved; secondly, when he went to school again in the asylum, he took up his lessons where he had left them off, showing that his intellect had not suffered. In addition to the local treatment above mentioned, he was given at first tincture of opium in five-minim doses, and afterwards draughts composed of ten grains of chloral and fifteen grains of bromide of sodium, to subdue the restlessness and alleviate the pain in the head.—Mr. KNOWSLEY THORNTON spoke of a case related to him by Dr. Image of Bury St. Edmunds. A boy, aged about seven, was playing in a farmyard, when a man engaged in filling a manure cart struck him accidentally on the head with a muck fork, one of the prongs of which, laden with filth, passed through his skull. He was dressed with cold compresses, and made a perfect recovery. He asked if children bore those accidents better than adults.—Dr. SYMES THOMPSON was of opinion that children bore accidents to the brain better than adults. He referred to a case of cerebral abscess he

had recently seen successfully treated at Cape Town.—Dr. C. E. BEEVOR asked if there were any hemiopia or affection of the sight, as the lesion was occipital. Last Christmas he was shown a boy who had sustained compound fracture of the frontal bone, the result of a kick from a horse. Much straw and dirt were introduced, but the case recovered without special antiseptic treatment.—Dr. FORBES WINSLOW inquired if Dr. Beach had traced these cases up to adult age. He felt sure that though at first no bad symptoms resulted, yet later, in cases of extravasation of brain, epilepsy or some other nerve lesion would develop.—Dr. ANGEL MONEY asked what relation the hernia cerebri bore to the pulse rate.—Dr. BEACH replied that in his experience children with brain wounds did well; in imbecile children wounds anywhere did astonishingly so. There was no hemiopia or squint. He had not traced the after-history of patients with cerebral injury. The pulse fell after the first hernia cerebri appeared, whereas it rose after the development of the second.

Mr. MARMADUKE SHEILD read an account of a case of Aural Exostosis removed by means of incision of the cartilaginous canal, and the application of the chisel. The patient was a woman twenty-seven years of age, who had been under the care of Dr. Bunn of Norwood. She had long suffered, from uncomfortable sensations in the right ear, and for three weeks before admission had become quite deaf, with attacks of agonising pain in the right ear and side of the head. She was first seen on Sept. 10th. It was found on examination that a large exostosis springing from the posterior wall of the canal almost blocked that passage, a mere chink being left anteriorly. As the symptoms were so acute, it was determined to attempt to remove the whole exostosis with the chisel. The details of the operation were described. The essential points were the incision of the auricle posteriorly at its junction with the skin over the mastoid, dissecting down to the bone in this region, incising the cartilage, and peeling away the membrane from the bone and from the exostosis. The growth being thus brought under command, a small sharp chisel was applied to the bone at its base, and it was easily cut away and removed. The auricle was replaced and readily united, the scar being quite concealed. All pain was lost, and the hearing was now most satisfactory. Reference was made to the performance of this operation abroad, and to its adaptability for the removal of impacted foreign bodies. A suggestion was made that its performance might facilitate the operation of drilling when this was considered needful; the growth being so much more under the eye and touch of the surgeon, a short drill-head could be employed, and thus the risk of swerving or slipping obviated. The question of the true structure of exostoses in this region was raised, and attention was drawn to the fact that it was remarkable that true "ivory" exostoses should so often occur on a portion of bone developed from cartilage.—Sir WILLIAM DALBY thought there were two conditions in which incision of the cartilaginous canal would be useful—(1) where it was difficult to operate because the external meatus was smaller than usual or was swollen, and (2) where immediate operation was necessary. Bony growths in the canal had been divided into two classes—those which grew from the posterior wall, true exostoses, which were not particularly hard, and hyperostoses, which were usually multiple and of ivory density. In the large proportion of ivory exostoses there was no occasion for operation, the passage being sufficiently large for hearing, but they required removal where dried scabs and matter became pent up behind them. He referred to the satisfactory results he had recently obtained with a drilling machine which made 2000 revolutions per minute, the cutting power being very great, the force required small, and there was no fear of slipping.—Mr. SHEILD, in reply, said that hyperostoses were rarer than true exostoses, and usually followed some irritation. They had broad bases, and created less obstruction than the other variety.

Dr. BENJAMIN HOWARD read a paper on "A New and Only Way of Raising the Epiglottis," of which the following is an abstract:—The epiglottis, as regards its functions, from the time of Plato to that of Magendie was conspicuous as a subject of dispute. Respecting the epiglottis as a factor in apnœa, on the contrary, that which was taught at the first has been taught ever since, and is to-day everywhere the rule of universal practice. This teaching is—(1) that in apnœa the epiglottis falls backwards and closes the glottis; (2) that the elevation of the epiglottis is the first thing in order and in importance, as without this respiration, whether natural or artificial, is impracticable and the result fatal; (3) the only way by which the epiglottis can be elevated is by means of the tongue; as the tongue is brought forwards the epiglottis is moved upwards. As a summary of results of prolonged and repeated investigations and experiments the author proposed to show:—1. The effect of traction of the tongue, what is done by it, and what is not done by it. 2. A new and only way of raising the epiglottis. 3. Some important changes in the relations of certain parts of the upper air passages to each other, induced by complete extension of the head and neck. By the aid of a series of diagrams made by the author from sketches he had made from nature he then showed: (1) Contrary to general belief, traction of the tongue, however and whatever the force employed, does not, and cannot, raise the epiglottis as supposed. Because (*a*) the tractile force supposed to be exercised upon the epiglottis is arrested chiefly by the frænum linguæ, and through the muscular fibres within is expended upon the inferior maxilla, into the genial tubercles of which they are inserted; (*b*) the surviving force is expended almost entirely upon, and intercepted by, the anterior pillars of the fauces; (*c*) for any tractile force which might survive a continuous and sufficient medium for its transmission to the epiglottis is wanting. Proof: The glosso-epiglottidean fossa being filled with water, the subject being so placed that the floor of that fossa is formed in part by the fallen epiglottis itself, traction upon the tongue, however forcible, does not cause the water to be spilled. As the author had just been publishing an improved way of seizing the tongue for the above purpose, this discovery was a great disappointment, and a great dilemma, as no other way of raising the epiglottis seemed to have ever been contemplated. After a search by no means easy or short, he discovered (2) the only way by which the epiglottis can be certainly raised, which is by extension of the head and neck. By this means its elevation is instant and complete; because (*a*) by a three-linked chain of which the hyo-epiglottic ligament is the lower link, the body of the hyoid bone the central link, the combined genio-hyoidei and mylo-hyoidei muscles the upper link, the epiglottis is so coupled to the inferior maxilla, just where it has its greatest range of motion, that above a certain point, as the lower jaw is moved upwards, the epiglottis instantly, irresistibly, and inevitably moves upwards exactly in unison till it is erect. The customary wrenching asunder the clenched teeth, in proportion as it depresses the body of the lower jaw, antagonises a distinct effort of nature to maintain the elevation of the epiglottis, and specially favours, sometimes helps, sometimes greatly increases, its depression. The author indicated on his diagrams the way in which other anatomical causes of obstruction in addition to the epiglottis respectively bar the air way, for all of which he submitted a positive and complete remedy, and showed (3) the way in which by extension of the head and neck, carried to the utmost completeness, the backward fallen tongue, the velum palati, and uvula are all simultaneously shifted from the air way, and the entire pharynx is enlarged throughout, as follows: (*a*) The tongue, the dorsum of which before fell by gravitation upon the then horizontal posterior wall of the pharynx, falls upon the now horizontal arch of the palate. (*b*) The velum palati, by means of the great tension of the palato-pharyngei muscles, is pulled away from the posterior wall of the pharynx, the entire membrane being stretched tightly forwards and downwards behind part of the dorsum of the tongue, forming a partition which helps to shut the tongue out of the pharynx, and into the mouth, where it belongs, and with part of the dorsum forms the anterior wall of a new post-oral air way, thus created and maintained. (*c*) The pharynx, anteriorly, is stretched far forwards by the extremely tense sterno-thyroidei muscles acting through the thyroid cartilage. By the genio-hyoidei and mylo-hyoidei muscles acting through the os hyoidei, the base of the tongue and the velum palati are shifted forwards in the manner already described, the posterior nares being shifted by the extension of the head by its occipito-vertebral articulation about sixty degrees. Posteriorly, the wall of the pharynx is shifted back its whole length by the extension of the cervical vertebræ upon each other, in all about thirty degrees, the extension being particularly great just opposite the glot-

tis. Thus, the upper air way, which before was a tortuous, angular, flaccid canal—barely, and if at all uncertainly, permeable—is made an enlarged, firm, but slightly curved tube, free throughout, from the glottis to the nares. The way to make complete extension of the head and neck: Having, by bringing the patient to the edge of the table or bed, or by elevation of the chest, provided that the head may swing quite free, with one hand under the chin and the other on the vertex, steadily but firmly carry the head backwards and downwards; the neck will share the motion, which must be continued until the utmost possible extension of both head and neck are obtained. Sometimes a slight elevation and extension of the chin merely will at once check stertor, or irregularity of breathing, but, understand, the extension, which can in no case do harm, should be always rather more than appears necessary. It should never be forgotten, however, that the full effects of extension, as above described, can be secured with certainty, only by making the extension complete as directed. That the customary pulling forwards of the tongue is followed by relief the author admits to be true in some cases, but in some cases only, and then it is not by the raising of the epiglottis. In the stage and in the case in which the backward fallen tongue happens to be the chief cause of obstruction, by pulling forwards the tongue that cause of obstruction is removed, nothing more; but there are other cases, other stages, in which it does no good at all. From over 13,000 fatal cases of asphyxia in England alone during the last three years, the author selected over 100 unequivocally attributed to the administration of anæsthetics, and in which, in all probability the tongue was skilfully pulled forwards in the recognised way, but the patients died. The author would be sorry to pretend to state of what they died, but he could not avoid the belief that in each case the epiglottis in all probability was not raised, and continued unlifted till death was complete. It could but be thought a happy feature, that instruments, the delays in getting them, in using them, the occasional violence and the invariable wounding with them, yet the utter helplessness without them, were in the procedure submitted so entirely superseded. It was not pretended that never before had the epiglottis in this way been lifted. For more than twenty years the author himself had published and illustrated a certain position in the treatment of apnœa. This position inevitably opened the epiglottis, but he did not know it. The old-fashioned swinging by the feet, the *tête à bas*, the inversion of the entire body, the chucking under the chin, the jerking the angle of the jaw—in each of these the good done, and which was the only and all-sufficient reason for the habit, is an interesting corroboration. Each tended to raise the epiglottis, but the operator did not know it. Further corroboration is in the familiar position instinctively assumed by the croupous, the diphtheritic, the asthmatic, the dying. A diligent search has failed to discover a single record in which any observer states that by pulling forwards the tongue he has seen the epiglottis raised. Nor is there a single reference to anybody who is supposed to have seen it. On the contrary, the facts here submitted have all been many times examined, and have been verified by distinguished anatomists at demonstrations made by the author at the Royal College of Surgeons, England, at King's College Hospital, and at Guy's Hospital; and at the Hospitals la Pitié and Salpétrière, Paris. The position of complete extension enables certain operations on the throat and pharynx to be done in anæsthesia without the usual peril from drainage into the trachea. The sum of what has been submitted is:—1. That, contrary to universal belief, traction of the tongue cannot raise the epiglottis. 2. By sufficient extension of the head and neck, whether by volition, instinct, reflex action, or by the effort of another—whether in the healthy, the dying, or the dead—the epiglottis is instantly and beyond prevention made completely erect. 3. By complete extension of the head and neck the tongue and velum are as respiratory obstructions, simultaneously with the epiglottis, removed, and without a moment's delay the entire air way can be straightened, enlarged, and be made free throughout by the nearest person. If syncope happen to be the chief or a secondary factor, this also thus gets the quickest and best correction. The author expresses the hope, as he has the confident belief, that the facts submitted will be found to be permanent additions to our means of averting death.

OPHTHALMOLOGICAL SOCIETY.

Stereoscopy by Difference of Colours.—Partial Hyperostosis of Frontal Bone.

THE first ordinary meeting of this Society for the present session took place on Thursday, Oct. 18th, Mr. Henry Power, F.R.C.S., being in the chair.

A paper was read by Dr. GROSSMANN, of Liverpool, on Stereoscopy by Difference of Colours for the Normal and Colour-blind Eye. He said that, when a boy, he had often noticed how strongly marked in some stained glass windows the red parts seemed to stand out from the surrounding surface. When a student he learned that this phenomenon was due to the difference of accommodation; the red rays, being less refrangible, required a greater accommodative effort than the blue ones, in order to be united on the retina. The eye, therefore, made the conclusion that the red was nearer than the blue. Lately, Dr. Einthoven had investigated this matter, and found the real reason to consist in the excentricity of the eye, and the symmetrical arrangement in the fellow eye, whereby the red rays were united on a more temporal spot of the retina than the blue rays. Also the position of the pupil was of such great influence, that shifting it artificially, for example, by partly covering its outer or inner half, would be sufficient to reverse the impression. Dr. Einthoven considered the phenomenon a purely stereoscopic one, with very little accessory help from the part of the accommodation; according to him, it disappeared completely when one eye was closed. Recently Dr. Grossmann's attention was drawn to this point again, and he had come to a somewhat different result. In his own case the phenomenon was attributable principally (if not solely) to accommodation. He arranged the two colours in a simple way, so that they formed a perspective drawing, and the stereoscopic effect was hereby greatly facilitated. When this figure was shown to some colour-blind (red-green blind) individuals, they also perceived the red nearer than the blue, both for binocular and monocular vision. This showed that with them also the act was principally one of accommodation. Dr. Grossmann now made figures with compound colours, using a bluish-red and a green. In this figure the red appeared nearer than the green to the normal eye, while the reverse took place for the red-green blind. Hereby another proof was given that the red-green blind eye perceived the blue only in the bluish-red, while the green was perceived as yellow, corroborating Hering's theory of four fundamental colours, and contradicting the Young-Helmholtz theory of three fundamental colours: red, green, and violet.—Mr. POWER had frequently noticed, when looking at a carpet with a pattern composed of lighter and darker colours, that the lighter after a while stood out the more plainly of the two, and this he felt sure was due, not to difference of colour, but simply to the relative lightness and darkness of different parts of the pattern.—Mr. BRAILEY found that those sitting near him agreed with him that the squares exhibited gave results exactly opposite to the theories of Dr. Grossmann.—Mr. DOYNE found he could alter at will and make either colour, the red or the green, more prominent. He thought it probable that the small error of refraction present in the majority of eyes would be sufficient to produce the difference.—Dr. GROSSMANN, in reply, said that if Dr. Einthoven's explanation were the only one, with exclusion of accommodation, it was certain that the stereoscopic effect would only take for one meridian, ordinarily for the vertical lines. If the pupil were not quite centric, it would ordinarily be situated towards the nose. Just as we could not see stereoscopically well horizontal parallel lines, but could easily distinguish vertical ones, this would be the case for lines of different colours. However, Dr. Grossmann placed parallel lines on a disc, and turned them round, when the stereoscopic effect remained, though weaker.

Mr. A. Q. SILCOCK exhibited a case of Partial Hyperostosis of the Frontal Bone. The patient, aged twenty, was first seen at the Moorfields Hospital in May, 1883. She then presented a swelling over the left eyebrow, round in outline, with smooth surface, hard and bony to the touch. The left eyeball was displaced forwards, downwards, and outwards. The swelling had existed for two years, and was said to be increasing in size; there was a history of a blow on the eyebrow. Iodide of potassium was given for some weeks,

but without effect, and she was lost sight of till May, 1888, when the swelling had become considerably larger. On May 10th much of the frontal bone was removed with trephine and gouge-forceps, but it was found impossible to extirpate the growth; since then no recurrence had taken place. He had shown the case on June 14th, and described it then as an ossifying sarcoma of the frontal bone; he brought it forward again because he desired to correct an error in diagnosis, as he now considered it a simple hyperostosis. Microscopically there was seen a richly cellular and ill-developed connective-tissue growth undergoing ossification. A description of two somewhat similar cases would be found in Virchow's work on Tumours. Hyperostoses presented greater uniformity than did exostoses, and they did not show themselves in the form of a tumour, properly so-called.

The following living and card specimens were shown:—

Mr. SILCOCK: (1) Connective-tissue Tumour in each Orbit; (2) Sarcoma of both Orbits.

Dr. TEMPEST ANDERSON: Instruments—(1) Simple Eye Speculum; (2) Method of applying Ointments to the Eye; (3) a Bench for Operating on the Eyes of Children.

Mr. GUNN: Double Proptosis.

Dr. W. J. COLLINS: Melanosis of Conjunctiva.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

The History of Sewage Disposal Inquiries.

AT a meeting of this Society on Oct. 19th, Professor W. H. CORFIELD, the President, delivered an address on the above subject. After briefly describing the way in which the question of the disposal of sewage has forced itself upon our attention in recent times owing to the rapid increase of the population and its aggregation in large towns, and also to the general adoption of waterclosets and the consequent more serious pollution of rivers, Dr. Corfield proceeded to summarise the conclusions arrived at by the various Royal commissions and committees which have been appointed to investigate the subject, commencing with the report made for the Poor-law Commission on the Sanitary Condition of the Labouring Population of Great Britain by Mr. Edwin Chadwick in the year 1842. He pointed out that in this report the advantages of the water-carriage system, as being the cheapest and most effectual method for the removal of excretal matters, was insisted on. The results obtained by the utilisation of the sewage of Edinburgh by irrigation were also described in the same report. The inquiries of the Health of Towns Commissioners in 1844 and 1845 confirmed the conclusions arrived at by Mr. Chadwick, which were amplified in the report of the General Board of Health in 1851 on the practical application of sewage water and town manures to agricultural production. The Royal Commission on the Sewage of Towns (1858-61) made a series of careful investigations into the various methods of sewage disposal, and came to the conclusion that "the right way to dispose of town sewage is to apply it continuously to land, and it is only by such application that the pollution of rivers can be avoided." The same result was arrived at by the Select Committee on the Sewage of Towns in 1862, who added that "solid manure cannot be manufactured from town sewage with commercially profitable results." The Royal Commission on the Pollution of Rivers, appointed in 1868, issued six important reports after a series of most elaborate investigations, and came to the conclusion that sewage can only be effectually purified by passing it through the soil. They also formulated a list of standards of purity for effluent waters discharging into rivers. The Birmingham Sewage Inquiry Committee, after examining the various systems in use at different places, arrived at the conclusion that "the best method of dealing with the sewage of the borough is that of intermittent downward filtration on the smallest area of land at the greatest convenient distance from the outfall, so as to command as large an area as possible for the ultimate utilisation by farmers." In 1869 the British Association appointed a committee to inquire into the subject; the labours of this committee extended over eight years, and they issued as many reports. They devised a more accurate method of taking samples of sewage than had before been practised, and also made a series of most important quantitative experiments by which they determined the percentage of the manurial ingredients of the sewage actually recovered in the crops on the sewage farm. The results of all these investigations not only caused irrigation on land for the purification of sewage to be widely adopted in this country, but also induced some other countries, and notably Germany, to adopt the same plan. Owing to the serious nuisance caused by the pollution of the Thames by the sewage of London, the Royal Commission on Metropolitan Sewage Discharge was appointed, and issued two important reports in 1884. They came to the conclusion that the sewage of the metropolis must not be discharged in its crude state into any part of the Thames, that the solid matters should be precipitated and the liquid portion be allowed to escape into the river *as a preliminary and temporary measure*, but that ultimately the liquid must be purified by application to land. The Metropolitan Board of Works, instead of setting to work to see how the recommendations of the Royal Commissioners could be carried out, "felt themselves unable to concur in the conclusions at which the Commissioners had arrived," and have not only continued their plan of attempting to deodorise the sewage while discharging it into the river as before, but have apparently, in spite not only of the reports of the Royal Commission, but of all the commissions and committees which have investigated the subject, determined to adopt chemical precipitation as a permanent measure, for they are building huge tanks for the purpose, and have actually embarked on a scheme for carrying the precipitated matters out to sea in barges. They have also secured the services of Sir Henry Roscoe to advise them as to the methods of deodorisation, but that eminent chemist, in reporting on the results of his investigations, has given them the following significant warning: "I offer no opinion as to the processes of precipitation by chemical treatment, as this question was not submitted to me by the Board. Looking, however, at the broad question of the permanent disposal of the metropolitan sewage, and believing that the use of deodorants ought to be regarded only as a temporary expedient, I feel convinced that sooner or later the recommendations of Lord Bramwell's Commission will have to be adopted, and that the sewage, whether previously clarified or not, must either be filtered through land or discharged into the estuary at a point not higher than Sea Reach. The growth of the metropolis during the quarter of a century which has elapsed since the adoption of the present main drainage and outfall system has been so enormous that arrangements which worked satisfactorily up to some few years ago are now found to be inadequate, and will of course become more so as time goes on." The President continued: "Can anything be more conclusive or more condemnatory of the action of the Metropolitan Board of Works? A Royal Commission is appointed especially to investigate the matter; the Board, whose duty it is to provide for the disposal of the sewage of London in the best possible manner, calmly ignores the conclusions arrived at by that Commission, and pursues a course condemned by it; while their chosen adviser informs them that sooner or later the recommendations of the Commission will have to be carried out. I protest, in the name of the Society of Medical Officers of Health of the country, against such a state of things, and against the further carrying out of a scheme which, while being enormously costly, will not only not settle the question, but will rather increase the difficulties of settling it effectually, and will be pointed out by succeeding generations as a disgrace to the sanitary work of the nineteenth century."

PROPOSED MEDICAL ASSOCIATION FOR DUMBARTONSHIRE.—A meeting of the Dumbartonshire medical men was held in the Elephant Hotel, Dumbarton, on Friday, the 19th inst., when steps were taken to form a Dumbartonshire Medical Association. The following gentlemen were appointed office-bearers:—Honorary Presidents: Sir G. H. B. McLeod, M.D. (Glasgow); Professor McCall Anderson, M.D. (Glasgow). President: W. A. Maclachlan, M.D. (Dumbarton). Vice-Presidents: Dr. Cameron (Old Kilpatrick); Dr. McLellan (Alexandria). Secretary: James Maclachlan, M.B., C.M. (Bonhill). Treasurer: Dr. Allan (Dumbarton). Committee: Dr. Gilmour (Duntocher); Dr. Stevenson (Clydebank); Dr. Wylie (Clydebank); Dr. James Wilson (Dumbarton); William Butchart, M.A., M.B., C.M. (Clydebank).

Reviews and Notices of Books.

Die Krankheit Kaiser Friedrich des Dritten, dargestellt nach amtlichen Quellen und den im Königlichen Hausministerium niedergelegten Berichten der Aerzte Prof. BARDELEBEN, Generalarzt I. Kl. und Kgl. Geh. Ober-Med. Rath in Berlin; Prof. von BERGMANN, Generalarzt I. Kl. und Geh. Med. Rath in Berlin; Dr. BRAMANN, erster Assistent der Kgl. chirurg. Klinik in Berlin; Prof. GERHARDT, Geh. Med. Rath in Berlin; Prof. KUSSMAUL, Geheimer Rath in Strassburg i. E.; Dr. LANDGRAF, Stabsarzt in Berlin; Dr. MORITZ SCHMIDT, Sanitätsrath in Frankfurt-a.-M.; Prof. SCHRÖTTER, Vorstand der Laryngol. Klinik in Wien; Prof. TOBOLD, Geh. Sanitätsrath in Berlin; Prof. WALDEYER, Geh. Med. Rath in Berlin. 8vo, pp. 103. Kaiserl. Reichsdruckerei, Berlin. 1888.

The Fatal Illness of Frederick the Noble. By Sir MORELL MACKENZIE. London: Sampson Low and Co. 1888.

[SECOND NOTICE.]

IN our previous notice we gave a brief historical *résumé* and criticism of the events that transpired from the commencement of the Emperor Frederick's illness to its fatal close. There remains for consideration the "medical protocol concerning the result of the examination of the body of His Majesty." In the first place, it must be noted that the terms of this protocol are not sufficiently explicit as regards the cavity noticed in the region of the larynx, which was plugged with cotton-wool and bismuth, as it is said, for embalming purposes. This cavity, Sir M. Mackenzie alleges, was that of a diffuse abscess which formed in consequence of Professor von Bergmann having torn up the pretracheal tissues whilst unsuccessfully attempting to insert a cannula, and which had ceased to secrete pus during the last few days of the illustrious patient's life. Further, in Sir M. Mackenzie's opinion, the "several ounces of pus secreted daily" came from this abscess, and found their way into the windpipe either at the tracheotomy wound or by an ulcerative perforation lower down. Now nothing could have been easier than to have settled the disputed facts by post-mortem observation. From Sir M. Mackenzie's version it would seem that the trachea was not examined throughout its entire length, and that therefore any destruction of tissue in front of the windpipe caused by Professor von Bergmann's alleged clumsy manipulation, or any ulcerative perforation therefrom, or any injury inflicted by the "badly fitting cannulæ" could not have been determined. Against this contention there are certain passages in the protocol above referred to. It is there recorded (1) that situated in the skin and partly in the subcutaneous tissue on the right of the edge of the opening leading to the cavity filled with wool was a pale flat protuberance, 2 centimetres high, 1·5 wide, and 0·5 thick. There can be little doubt that this nodule was of cancerous nature, and had either formed in continuity with the laryngeal growth or had sprung up from lymphatic infection. In favour of the former hypothesis is the fact that "the underlying muscles were entirely free." (2) A definite description is given of the extent of the gangrenous surface of the cancerous and necrotic tissues of the larynx and upper part of the trachea. It seems certain that the upper part of the trachea was destroyed in the same way as the cartilage of the larynx; in fact, the lower edge of the sloughing ulcer is said to have been formed by the trachea. Now it is obvious that any false passage Professor von Bergmann may have made would be situated below the tracheotomy wound; but what says the protocol in explanation of the allegation? "This lower end [meaning the lower edge of the tracheotomy wound] was moderately clean cut, extending through the mucous membrane and presenting small grey granulations which covered an area of about half a centimetre. Then followed normal mucous membrane over the still existing tracheal rings. In the tissue of the still existing part of the trachea there was no evidence of cicatrisation, but purely normal conditions." If this quotation accurately represents the truth, there is an end of the question as regards tracheal perforation and endotracheal injury below the tracheotomy wound. (3) Although incisions were made on both sides of the neck, the underlying muscles were found to be entirely free, a circumstance one would scarcely have thought to have obtained in the presence of a diffuse cellular abscess—that is, if the incisions were made of reasonable length. The protocol, it will be remembered, was signed by Sir M. Mackenzie, as well as by the German pathologists and physicians. It seems, then, that either Sir M. Mackenzie was not cognisant of all that was contained in the protocol, or that in the hurry of the moment he did not grasp the import of the text, for on page 215 of his recent work we find the following words: "An immense abscess cavity is found after death just in the place where Bergmann made the false passage." The protocol, as we have said, evidently refers this cavity to the region of the larynx, and not to the pretracheal space below the tracheotomy wound. Surely the discrepancy could be rectified, but in the present daggers-drawn attitude of the parties to the controversy we fear no such desirable end will be achieved.

It has not been denied that the tissues of the larynx were necrotic during life, and therefore the plea put forward by Professor von Bergmann in proof of the groundless nature of Sir M. Mackenzie's charge of his having made a false passage—viz., that only the upper surface of the tracheotomy tube was blackened by sulphuretted hydrogen—seems to us of little weight, although as far as it goes it rather supports than undermines Professor von Bergmann's defence.

Our readers will refuse to believe that men of Professor Virchow's and Professor Waldeyer's standing would fabricate a lie to bolster up the damaged reputation of a colleague. The case resolves itself then into one of mistaken pathological identity on the one side or the other. We cannot agree with the suggestion that the alleged abscess cavity in front of the trachea was not recognised because little or no pus had been secreted during the last few days of the late Emperor's life, since that would be running counter to the first principles of morbid processes.

OUR LIBRARY TABLE.

On the Preventive Treatment of Calculous Disease and the use of Solvent Remedies. By Sir HENRY THOMPSON, F.R.C.S., M.B. Lond., Surgeon Extraordinary to H.M. the King of the Belgians, Consulting Surgeon and Emeritus Professor of Clinical Surgery to University College Hospital, &c. Third Edition. London: J. & A. Churchill. 1888. — This *brochure* contains three lectures delivered at University College Hospital. That on the solvent treatment of calculi is little if at all altered, and, although important, will not attract so much attention as the two others, which deal with a matter of the highest practical interest in all cases of urinary calculus—viz., their prevention. This important subject is discussed in two excellent lectures, and the treatment advocated is partly dietetic and partly medicinal. Fats and sugar in all forms are to be rigidly excluded from the dietary, and the medicine most commended to prevent the excretion of too large a quantity of uric acid is the combination of Carlsbad water with Hunyadi Janos water. For the details of the treatment, however, we must refer our readers to the excellent text of Sir Henry Thompson himself.

L'Alcoolisme Etude Médico-Sociale. By Dr. E. MONIN. Paris: Octave Doin.—In this remarkable work, which

obtained for the author the first prize of the Société Française de Tempérance, Dr. Monin has endeavoured to expose the dangers and disorders produced by alcoholic drinks, not only in those who indulge in them, but also in their descendants. He refers also to the action of alcohol on the different races and professions, soldiers, women, children, &c. It is a complete dissertation on the subject of which it treats. Dr. Monin, who is a prolific writer, has written this work in such a way that it will be found interesting and comprehensible even by those who have not received a scientific education. The work opens with a most interesting preface from the pen of Dr. Dujardin-Beaumetz, whose cogent remarks may be considered worthy of notice here. "It may be said that, according as civilisation advances, man seeks in drunkenness a compensation for, and forgetfulness of, the annoyances and sorrows which result from the daily struggles of life. But alcohol destroys the body as well as the mind. If the law should be pitiless for those poisoners of the working classes, it should also protect and favour the use of healthy drinks. Wine is not useless, it is a tonic drink; and France, which possesses renowned vineyards, cannot, like our neighbours of the other side of the Channel, preach absolute abstinence from alcoholic drinks. What should be combated and repressed is the abuse of these drinks and their adulteration. This is the doctrine that the Société Française de Tempérance has always upheld." The last chapter contains some philosophical and economical views, as well as remarks on the treatment of alcoholism, which will be found both interesting and useful.

Another World; or, the Fourth Dimension. By A. T. SCHOFIELD, M.D. Pp. 92. London: Swan Sonnenschein and Co. 1888. — This *brochure* is an earnest and entertaining protest against the doctrines of materialism. The author's aim has been to demonstrate the existence of an unseen and yet all-seeing universe outside the range of our consciousness of external objects. His contention is that it is impossible to form an accurate conception of the attributes of those existing in the fourth dimension; but of their existence, and of some of their relations to the world of three dimensions, he argues from analogy in a sufficiently interesting way. His conclusions merit consideration, although they are open to all the attacks ordinarily directed against analogies. The allegorical tone is somewhat irritating in some of the chapters.

Artificial Plants ("Flora Artefacta.")—We have received from Messrs. Southall Bros. and Barclay, of Birmingham, some samples of the artificial plants arranged by Christine Janch, under the scientific supervision of R. Stein, inspector of the Royal Gardens, Breslau. These plants are life-size representations of living specimens which cannot always be obtained in the fresh state, and appear to be well adapted for teaching purposes. Those submitted to us are accurate in form and colouring, and supply a much clearer notion than could be derived from any engravings or diagrams. The series includes many medicinal plants which are rarely seen in this country in the fresh state. They are supplied at moderate prices.

Illustrations: a Pictorial Review of Knowledge. Conducted by FRANCIS GEO. HEATH. London: W. Kent and Co.—This is an extremely well got-up volume, suitable for the young and the more mature. The illustrations are remarkable alike for their variety and their excellence; and, on the whole, the same remark may be applied to the text.

THE Leeds Company of the Volunteer Medical Staff Corps were inspected on the 20th inst. by Deputy Surgeon-General Ferguson, principal medical officer of the northern military district, who, at the close of the proceedings expressed his pleasure at the work he had seen carried out.

Analytical Records.

VAPOUR CONES.

(THE CHEMICAL CARBON COMPANY, LIMITED, BASINGSTOKE; AND H. MENDS, 62, HOLBORN VIADUCT.)

SOME time ago we noticed these cones with approval, but the manufacture has been so much improved and the applications so considerably extended that a few additional remarks are called for. The cones are all alike. They are hollow, and several inches in height. When ignited on the clay supports supplied with them they deflagrate quietly and slowly from the top downwards, producing a steadily increasing heat. Inside each cone is placed a small flask containing the substance which is to yield the vapour. A plug confines the substance, but readily permits it to escape in the gaseous form under the influence of heat. In this way a definite and sufficient fumigation is produced with the greatest ease and with no danger, if care be taken to place the clay base on a non-inflammable surface. The samples submitted to us contained fifteen varieties of remedial agents, including stramonium, bromine, the chlorides of mercury, chlorine, carbolic acid, ammonium chloride, sulphur (for baths), and sulphurous acid. We have tried the cones, and in some cases examined the contents of the flasks, and have obtained most satisfactory results. We believe the invention to be a valuable one. The cones, it will be seen, are entirely different from, and in many respects superior to, pastilles; for not only do they convey into the air definite weights of the volatile agents, but they permit the use of bodies so volatile that they could not be carried in any kind of pastille.

EUCALYPTUSINE.

(H. & T. KIRBY, NEWMAN-STREET, OXFORD-STREET, LONDON.)

A fragrant and most refreshing essence, in which it requires no analysis to detect the delicate aroma of the eucalyptus. The value as a disinfectant of the eucalyptus oil has been exaggerated, and we must treat this essence rather as a useful and pleasant toilet preparation than as a rival to the active chemical preparations which are required in serious zymotic disease, but we by no means deny its value. A few drops give an invigorating perfume to a large volume of water, and so used will be welcome in the sick chamber, the bath-room, and the nursery. It is said to act as a deterrent to mosquitoes and other animal pests. If this be so, it will indeed be a blessing in many families.

THYMOL TOILET POWDER.

(H. & T. KIRBY, NEWMAN-STREET, OXFORD-STREET, LONDON.)

We find in this powder, besides the characteristic, well-known, and valuable thymol, zinc oxide, starch, and a fine powder insoluble in acids. Such a cosmetic is not to be specially recommended, although it cannot be stigmatised as noxious in itself.

BEEF BOUILLON

(BRAND & CO., MAYFAIR.)

This is a good, soluble, and palatable beef preparation. It represents a thoroughly cooked meat; for the microscope shows much muscle fibre, while chemical analysis proves the absence of coagulable albumen. Such liquid foods, produced at moderate cost, are invaluable for general use, and we are glad to learn that their sale is extending.

CAFFEINE, PREPARED FROM DENATURED TEA.

(HOWARD & SONS, STRATFORD, ESSEX.)

A pure and beautifully crystallised preparation. The form of the crystals and the well-known reaction with nitric acid and ammonia proved its identity beyond a doubt. The fact that millions of the human race have become dependent to some extent upon the plants which

contain caffeine confers a singular interest upon the alkaloid. Its therapeutic action is even now but ill understood.

PROF. KREMIANSKI'S MEAT POWDER.

(GOSPODIN, SEREDINTSKI, KHARKOFF, RUSSIA. LONDON: T. MAXWELL.)

Our analysis of this food gave the following results in parts per cent.:—

Water &c., volatile at 100° C.	12·30
Fat	7·90
Albuminoids	65·90
(Containing nitrogen, 10·45.)	
Ash	4·04
(Containing 20·76 per cent., P_2O_5.)	

This is therefore a most nutritious and very concentrated food.

UNIVERSAL DIGESTIVE TEA.

(UNIVERSAL DIGESTIVE TEA COMPANY, LIMITED, CORPORATION-STREET, MANCHESTER.)

At the request of the proprietors we have repeated the examination of this tea, which we recorded in a former notice. We regret that we cannot alter our previous opinion. The alkalinity of the tea is a trifle higher than is usual, but otherwise we can find nothing noteworthy in regard to it. The tannin was about normal.

New Inventions.

NEW SYRINGE FOR THE MIDDLE EAR.

IN old-standing cases of chronic suppuration of the middle ear, and in other lesions in aural disease, one of the first conditions calling for treatment is thorough irrigation of the tissues involved. It may, I think, be safely stated that hitherto appliances for such a purpose have been all alike defective, and some positively injurious. Hinton's method of forcing fluid through the cavity is not devoid of risks; while the nearest approach to a good instrument—viz., Hartmann's tympanic tube—has many drawbacks. The tube itself is unnecessarily large in calibre, requires the services of an assistant, and even then is troublesome to the operator and painful to the patient. Owing to the loose arrangement of its parts (tube, tubing, and ball), jarring movements are communicated to the tender parts of the ear. The syringe here figured, as made under my instructions by Messrs. Coxeter and Son, will, I trust, be found on use to be devoid of many of the defects of other similar appliances. The straight part of the tube is three inches long, so that it can be used with ease through a speculum; it is provided at the distal end with a movable beak, but at an open angle, and united by a slip joint. The beak can thus be revolved in any direction. The proximal end of the straight tube is bent at an open angle, and continued for an inch; and to this is fixed by a slip joint a one-ounce balloon. The calibre of the tube throughout is one millimetre, and the syringe, when put together, feels light and solid, so that in its use no jarring need be communicated to the parts when it is placed *in situ*. Again, the fineness of the tube, and the direction given it at the proximal end, render it possible to keep it well in view during operation. With this instrument it is perfectly possible to thoroughly cleanse every part of the tympanic cavity, no matter how small the perforation and where situated. I allude to cases such as are generally met with in practice. The movable bent beak permits of the irrigating fluid being conveyed in all directions, and, if necessary, suction can be applied. Sinuses leading down to diseased bone in the meatus &c. can also be treated, and, where conditions permit, the Eustachian tube can be flushed. All such procedures can be carried out by the operator himself unassisted, and without the slightest discomfort to the patient. With various solutions, such as solution of sulphate of soda (5 per cent.), or perhaps one or other of the digestive ferments suggested by Dr. McBride, the most tenacious exudation membrane can be readily got rid of, and in a much shorter period than I have found when using other appliances. I have often observed, after even the first application of the syringe, in perforations, the opening blocked by such membranes, washed out of the middle ear and lying thus ready to be disposed of. Subsequent treatment of the mucosa by corrosive chloride usually restores a healthy tone to the parts, with a cessation of inflammatory processes and discharge. There is very little need, if any, for the use of powders (boracic acid &c.) or strong caustics, provided the tough membranous exudation deposits referred to are got rid of. Until these are dislodged, the discharge continues and granulations flourish. With the effective aid rendered by this syringe I have been enabled to restore fairly good hearing in cases where a loud watch was heard on contact only: in one case of thirty years' standing, in another of fourteen years', in another of eight years', and in all of whom ear treatment had been more or less tried. I do not claim everything for the use of this syringe in such cases. Lesions in the neighbouring parts must be treated concurrently, the permeability of the Eustachian tube must be upheld, and the naso-pharynx appropriately treated.

WM. ROBERTSON, M.D. Glas., &c.

Newcastle-on-Tyne.

SANITARY WOVEN HORSEHAIR ABDOMINAL BELT.

WE have received from Messrs. Arnold and Sons, West Smithfield, one of their patent sanitary woven horsehair abdominal belts, for which they claim, amongst other advantages possessed by the material of which it is made, that it combines lightness with firmness, that it is non-absorbent, thus earning its title "sanitary," and is of great durability. All these qualities will recommend it to the consideration of the profession; whilst its durability will be of special service in hospital practice, where the element of expense enters so largely into the consideration of surgical appliances. It is a frequent experience to find patients suffering from commencing ventral hernia, due to the yielding of the scar after operation, neglecting to wear the necessary support because of the expense of providing a new one, the one provided by the hospital at first having worn out whilst the scar was still pliant and yielding. The patentees say that the sanitary woven horsehair material can also be applied in the manufacture of respirators, trusses, every description of pad, chest protectors, corsets, knee-caps, and a long list of other appliances.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The directors of the Society held their quarterly court on Wednesday, Oct. 10th. The President, Sir James Paget, took the chair at 8 o'clock. One member was elected, and the death of one reported. Applications for grants were received from sixty-three widows and thirteen orphans, and a sum of £1377 was recommended to be distributed among them at the next meeting. A fresh application for relief was read from a widow, for herself and three children, and a grant at the rate of £60 per annum was made. It was resolved to celebrate the centenary of the Society by a present of £5 to each widow on the funds and £3 to each orphan; the present, amounting to £346, to be made on Oct. 29th, the anniversary of the first meeting of the Society.

THE LANCET.

LONDON: SATURDAY, OCTOBER 27, 1888.

THE Royal College of Physicians has this year kept its "commemoration day" in a spirit befitting the occasion; for, whatever may be urged in opposition to display and revivals of ancient practices, there can be no doubt that the academical robes, which, in obedience to the wishes of the College, were donned by so many of the Fellows, added an unwonted brilliancy and dignity to the scene, and helped to relieve the somewhat sombre surroundings amidst which the Harveian Oration has for years past been delivered. The audience, which included many highly distinguished members of other professions, was further gratified by the tone and character of the oration itself. Dr. LATHAM wisely resolved that the best way to celebrate the discoverer of the circulation of the blood was to dwell upon the latest advances in our knowledge of the causes of disease, so many of which have been gained by the simple, patient method of investigation of nature which HARVEY pointed out as the guiding principle of all genuine seekers after truth. The result has been a most suggestive and learned discourse, which did more than merely mark the limits of knowledge yet attained, for it pointed the way whereby we may hope to still further unravel the mysteries of disease.

"Probably no other discovery since that of the circulation of the blood appears to be so full of promise in elucidating the causes and courses of some diseases as this one," said the Harveian orator in reference to the discovery of the *rôle* of micro-organisms in disease; and there is much truth in the statement, for in the whole history of medical science it would scarcely be possible to indicate any such marked revolution in ideas as that which has been and is taking place with respect to the etiology of disease, from the introduction of what has even now become the dominant factor in pathology. It is no passing fancy or theory, which will be set aside by the next generation, and be as forgotten as some of the old "systems" that have had their day. For in spite of much scepticism, the study of bacteriology continues to make steady progress, and to add to the sum of knowledge very definite and positive facts. Nevertheless, the wider the subject grows the more intricate it becomes, whilst new problems are constantly presenting themselves for solution in connexion with it. Thus the mere discovery of a micro-organism in the blood and tissues, which in the earliest days of the "germ theory" was held to be the proof of the bacterial nature of a disease, now goes for very little. There are numberless ways in which such an invasion may occur, without having any pathological significance. The whole alimentary tract teems with microbes, and the pulmonary organs are not so constituted as to filter the air that contains myriads of these microscopic organisms, the presence of which therein can only be revealed by skilfully contrived experiments. A further test was required to prove that a microbe was pathogenic. It must be isolated, and cultivated outside the body; and, to our thinking, few experimental methods are more striking in their simplicity and accuracy than those devised (primarily by KOCH) for these ends. It was a great advance surely to demonstrate that these infinitely minute fungoid organisms could be sown on a culture medium and their growth observed "each after its kind"; so that a drop of water or a bubble of air could be proved to contain several distinct species of microbe. But more than that was needed to show that bacteria were related to disease, in a manner similar to that in which they were proved to be essential to the processes of fermentation and putrefaction. The disease must be reproduced in animals by inoculating them with the cultures. It is well known with what measure of success these procedures have been followed; but yet the experimentation led to new problems for solution. The immunity of certain species of animals to the effects of such inoculation, the effect of attenuating the virus, and the discovery of protective inoculations are some of the fruits of such researches, embracing questions of the highest practical importance. Doubtless the history of the subject contains many errors in observation and inference; but the sum of it all is the addition of sound facts, and the formation of hypotheses, not a few of which have come to be accepted as true interpretations of the phenomena observed.

But there is one question—and it is this which formed the main burden of Dr. LATHAM'S oration—which even more than the discovery of a specific germ must engage the most profound study. Granted that a bacillus is the cause of anthrax and tubercle, and a spirillum that of relapsing fever, how does it operate in producing the disease, and in what relation does it stand to the blood and tissues of the infected organism? The remarkable investigations of METSCHNIKOFF have thrown light upon part of this question, so that it can hardly be disputed now that there is a distinct antagonism between the living cells of the body and the foreign parasitic intruder. The great founder of cellular pathology himself recognises this, although, with pardonable enthusiasm, he points to it as a confirmation of his views of the paramount importance of cell life in nutrition and in disease. But the question does not rest here. From what is known of the operation of similar micro-organisms outside the body, as in the processes of fermentation and putrefaction, it is inferred that they have allied functions within the body, and that the effects, which we style disease, are the result of the action of poisons produced through the operation of the microbe in its own limited sphere. Dr. LATHAM has done good service in pressing this question home, and in demonstrating upon chemical grounds the possibility of production of such poisonous products from disintegrating albumen. He showed, too, how, even without the intervention of micro-organisms, such products (as from fatigue) may be produced; whilst his suggestion that, under certain conditions of lowered vitality, the body is exposed the more readily to the operation of bacterial infection, with all its untoward results, is in strict harmony with what is known of the causes of disease. In the face of the new problems suggested by these considerations, is it not true that increase of knowledge brings increase of toil? There is set before the investigator a vast field of research, embracing the changes in the body which

mark the earliest departure from health on the one hand, the changes that predispose to disease on the other, and still more the changes initiated and maintained by the specific contagium (virus or microbe) concerned. No longer can we be content with signalising the effects produced in organs and tissues; we must hope to unravel the inner mysteries and make plain the secret workings of morbid processes. For this we must look to the physiologist and to the chemist; for the more we know of the intimate processes of nutrition in health, the higher will be our prospect of learning what is the nature of disease; and the outcome of all this research will be a sounder pathology and more rational therapeutics. In the latter respect it may teach us, as Dr. LATHAM suggested, the futility of attempts to destroy the virus within the body, and show us that our aim should be to so maintain the vitality of the cells of the body that they may resist the action of the virus. It is then to the "*predisposing*" causes that the attack must mainly be directed, and chief among these are the influences which deteriorate the normal healthy constitution of blood and tissue. On the question whether specific diseases arise *de novo*, or, in bacteriological terms, whether non-pathogenic organisms can become pathogenic, we will not now offer an opinion. Dr. LATHAM agrees with those who think that this is probable, and the idea has been frequently shown to be more in harmony with evolution than the exclusive doctrine of specific germs. Yet, as with organic life on a large scale, we may grant its possibility in the remote past, without admitting that conditions are now present for it to occur. It is, moreover, a question that lies outside practical medicine, and, once admitted as a universal explanation, might operate harmfully in minimising the importance of contagion. Of more pressing interest are the problems alluded to above, and we trust that one effect of Dr. LATHAM'S philosophic discourse will be to quicken the spirit of investigation towards their solution.

THE Americans are a wonderful people. Last year they were fortunate enough to have the International Medical Congress at Washington; this year they have had one but little less important in its influence on the profession. The meeting of this year was also called a Congress—the Congress of American Physicians and Surgeons. But it was by no means made up of American physicians and surgeons only—it was largely fortified by many European practitioners of eminence, and especially by our own countrymen. Sir SPENCER WELLS, Sir WILLIAM MAC CORMAC, Dr. PRIESTLEY, Dr. ORD, Dr. FERRIER, Dr. PYE-SMITH, Dr. GRAILY HEWITT, Mr. DURHAM, Mr. VICTOR HORSLEY, Mr. HARRISON, and many others attended, and either read papers or took an active part in the proceedings. Whether it is that our brethren have discovered an efficient prophylactic against sea-sickness, or that they despise such slight ailments, it is obvious that they are becoming more indifferent to the passage across the Atlantic. Probably it is the very kind reception they meet with on the other side which leads them to regard the ocean as only a bond of connexion instead of a barrier, and to regard a run to the States in the late summer as one of the most pleasant ways of taking a holiday.

The Congress itself deserves some description. It is made up of about fifteen associations for the promotion of medical and allied sciences. According to the *New York Medical Record*, which has devoted forty-eight extra pages to a report of the proceedings, the Congress at its birth was composed of eleven societies. At this session it has admitted the American Gynæcological Society. Two new societies — the American Pediatric Association, and the Association of American Anatomists — were organised during the session, and have asked for admission to the Congress. The American Association of Obstetricians and Gynæcologists have also made application for admission to the Congress, which is to meet every three years at Washington. This is the first meeting. The number of registered associates of the Congress, members of one or other of the component societies, was about 1400. The Congress is ruled by its Executive Committee, which is made up of one member from each participating society. Its President is elected by the Executive Committee, and for this, the first Congress, Dr. JOHN SHAW BILLINGS was elected president. In calling the meeting to order, and announcing the plan and president of the Congress, Dr. WILLIAM PEPPER, chairman of the Executive Committee, explained that the deliberations which led up to this Congress began about four years ago, before the attention of the profession was occupied with the International Medical Congress, and that all action was deferred till there should not be the semblance of interference with that important meeting. All Parliamentary and political subjects are excluded, and the function of the Congress is designed to be absolutely scientific. It will be noticed that this Congress has quite a novel constitution. Other congresses and associations are made up directly of members; this is composed of associations. Its members must be members of these component associations, and its expenses are paid by the participating societies. Dr. PEPPER in his opening statement said that close study of the conditions of the Congress led the Executive Committee to feel that if this organisation were to have the effect of favouring the multiplication and subdivision of special societies, it would be nothing less than a calamity, and to guard against this it is provided that new associations shall be affiliated only by the unanimous vote of the Executive Committee. We shall be curious to see whether the rule of the executive is sufficient to check the mushroom-like growth of societies which seem to overlap and overpower one another, and which, we confess, seems to us rather encouraged by the constitution of this Congress. Certain it is that the multiplication of societies in the States needs no forcing. It is carried on to an unfortunate extent. We have already given prominence to an illustration—the Association of Genito-urinary Surgeons. There is no guarantee that we shall not have many subdivisions of this group. The proceedings of the Congress afforded many illustrations of labeling a group of men as if they had special care of bits of the body, or special skill in dealing with them. We shall instance only one or two. The palpation of the ureters in the female was treated of in the American Gynæcological Society—for the proceedings are reported under the head of the separate societies, — not in the Association of Genito-urinary Surgeons. In one page of our contemporary's report we

find "Residence in High Altitudes as a means of Cure for Laryngeal Phthisis" treated in the American Laryngological Association, on Tuesday, Sept. 18th, and on the same day the American Climatological Association was engaged in the "Study of the Climate of Colorado for Pulmonary Diseases." Be this as it may, we have a Congress on a new basis, very different from the American or British Medical Association, where any individual may become a member without being a member of any medical society. In the American Congress case he becomes associated with the Congress in virtue of his membership of a society. It is as if, in place of the existing constitution of the above associations, it were made up of members of all associated medical societies, and governed by an executive committee made up of nominees of these societies. In other words, the Report of the Congress is the report of the proceedings of twelve or fifteen separate societies, many with almost identical names and objects. It certainly seems to us that to bring all these societies to Washington to air their individuality before the world and the President of the United States is to stimulate their multiplication.

We cannot pretend to give here any abstract even of the scientific work reported by the Congress, or rather by its various component societies. It certainly was work of the most varied kind, and some of it, judging from necessarily brief reports, of high excellence. Dr. LUSK reported three cases of Cæsarean section by SANGER'S method, in which the mothers recovered and two children survived. The great question of Cerebral Surgery received brilliant illustration both from American authors and from our distinguished countrymen, Dr. FERRIER and Mr. VICTOR HORSLEY. Dr. HETTZMANN, of New York, read a good paper on the value of Salicylic Acid in Skin Diseases, especially hyperidrosis' lichen planus, furunculosis, callosities, pruritus ani, &c. Personal observations of 500 cases of Skin Disease in the Negro, by Dr. MORRISON, of Baltimore, were instructive. Acne, eczema, scabies, and favus are not common; lupus is rare; though the negro is prone to pulmonary tuberculosis. The question of Laparotomy in all its bearings was fully discussed. The President's address was on the subject of Medical Museums, and was characterised by that breadth of learning and suggestion which we might expect from Dr. BILLINGS. In concluding our notice of this important gathering, we may express a hope that its reports in a complete form will ere long be available for general use.

WHILE we are by no means disposed to take a pessimistic view of human life and progress, and while we hold to the belief that the tendency of human affairs is towards the attainment of a higher plane of morals and practice, we think there are at present some disquieting signs of a temporary declension in the public tone and taste which is worthy of the consideration of all thoughtful men. We refer to the growth of a taste for sensationalism, as shown by the character of journalism, fiction, and the stage. With some honourable and noteworthy exceptions, the daily press aims at serving up a constant succession of highly spiced dishes to its readers, and takes care to report at inordinate length, and often with objectionable minuteness, the details of the latest murder, divorce, or fashionable scandal. The Whitechapel tragedies have afforded a typical case in point; and what with gruesome descriptions of the victims, elaborate conjectures as to the precise mode and motive for the crimes, and interminable theories as to the best means of discovering the criminal, one would think that the thoughts of the entire nation were practically absorbed in the contemplation of revolting wickedness. We are far from thinking that such events could or should be hushed up or ignored. Murder is the most anti-social of crimes, and so strikes at the root of individual safety and security that it justly claims immediate and earnest attention. What we deprecate is not reasonable publicity as regards the fact of crime, but the prurient and demoralising amplification of its sickening details. We protest against such pandering to low passions on no mere grounds of sentiment or pietism, but on the far more solid foundation of scientific evidence regarding its corrupting influence. Familiarity with crime is seldom wholesome, and to the weaker and more ill-balanced minds is assuredly perilous. The knowledge as well as the sight of the means to do ill deeds oft makes ill deeds done. The exploits of "Jack the Ripper," as detailed for our delectation at the breakfast table day after day, are likely not only to hurt the consciences of innocent minds, but to fire the imagination, and perchance kindle the emulation, of those just hovering on the verge of criminal violence. It is in vain that such descriptions are accompanied by sententious and virtuous moralisings. When we have befouled ourselves with pitch there is little advantage in calling for a looking-glass and owning with compunction that pitch is very black and altogether objectionable.

The same drift towards sensationalism is seen in the popularity of the realistic novel. There is much virtue in a phrase, and when we call a novel realistic the unwary may take the epithet as implying that such fiction delights in truth and fact rather than in idealism. But the realism which M. ZOLA has popularised in France, and which threatens to invade us in England, does not consist in the truthful portraiture of all aspects of human life, but in the deliberate and systematic choice of what is vile and corrupt for the purposes of fiction. It is as if a painter, determined to paint nature and nature only, were to neglect the wood, the stream, the ocean, and human beauty, and fill his canvas with nothing but sores and ulcers and deformities. Such art would be realistic at the expense of sacrificing its true ends—namely, the promotion of pleasure by means that elevate and ennoble. A healthy all-round genius, like SHAKSPEARE, whose admirable equipoise is as wonderful as his insight, will, no doubt, often dwell on the darker sides of human life, and will occasionally say things hardly fit "*virginibus puerisque*," but he will be sure to paint man as a rational, self-controlling being, and not as a wanton savage. MATTHEW ARNOLD once said that our French neighbours were unhappily "given over to the worship of the great Goddess Lubricity." What has been the result? Alone among great nations France has to lament a declining population, one of the most certain indications of waning national prosperity. The domestic virtues may be very commonplace, but they are indispensable. Nature will quietly punish with extinction the nation which systematically ignores them.

The condition of the stage in England affords so many

grounds for hopefulness that we are the less inclined to dwell upon its defects. The revived and universal recognition of the magnificence of the great Elizabethan drama, the immense popularity of the British comic opera, which can be witty and amusing without ribaldry and indecency, and the favour accorded to such dramas as those of the late Mr. ROBERTSON,—these are all wholesome signs. But we see the other side in the popularity of the melodrama and the spectacular displays which hold the boards in some of our leading theatres. The pantomime may suit the child, but, if dramas which rise no higher in the intellectual scale than pantomime find a wide popularity, it speaks ill for the maturity of taste of those who should have put away childish things.

It may be a question how far this craving for excitement is simply the outcome of the over-tension of modern civilisation. The Anglo-Indian needs curry to whet his jaded appetite, and the modern Englishman lives at such high pressure that simple pleasures may cease to amuse him. If so, the admission is a disquieting one. The return to nature, the reversion to simpler, healthier, less exhausting occupations and pleasures, may be difficult, perchance impossible, but something might be achieved if it were even recognised that such a return is a consummation to be desired. Mr. BALFOUR, in his recent remarkable address to the Church Congress on Positivism reminds us that nation after nation has achieved a high level of culture, and after a little time has wearily laid down the burden of advanced civilisation. The question is, Can this burden be lightened so that at least it may be carried a little longer? The sensationalism of the day is one of its elements, and tends to the exhaustion of the emotions without any corresponding benefit. We must discourage it and seek to keep it in check by all the legitimate means at our command.

WE have on many occasions expressed an opinion upon the merits of the Medicine Tax, and adduced what seem to us very good reasons for urging its complete and speedy abolition; but that that consummation is still very far off, and that much has yet to be done in the way of educating public opinion and moving the Government in the matter, is brought home to us by a neat little volume which has just been issued from the office of the *Chemist and Druggist* under the title of "Handy Book of Medicine Stamp Duty." Its preparation has been entrusted to Mr. E. N. ALPE, of the Inland Revenue Department, and if we considered only the excellence of his workmanship we should be quite disposed to wish his book a long as well as a prosperous career. As a guide to what is and what is not comprised within the purview of these perplexing statutes, the work is calculated to be very useful to chemists and druggists and to others whom it concerns. But its use will pass away with the repeal of the Acts which it expounds, and we cannot, even out of complacency with a well-wrought piece of work, desire or expect that this will be long deferred.

In a brief introductory chapter a sketch is given of the history of these Acts, and, as pains have been taken to make the story accurate, it possesses a permanent value. Like so many other burdens upon the British taxpayer, this impost was invented at a time (1783) when the Chancellor of the Exchequer was grappling with the financial troubles involved in a great war; and not without reason does Mr. ALPE remark that "it was scarcely to be expected that in a period marked by yearly deficits and unsatisfactory budgets so flourishing and profitable an industry" as that of the trade in proprietary medicines should escape attention. In such circumstances the impost may even have been justifiable. Necessity knows no law, and something very like a necessity presided at the Treasury in those days. But the necessity has long since passed away—the tax remains. The reason of its perpetuation is, no doubt, that no serious and well-directed effort has yet been made to procure its abolition. Modified it has been from time to time, according to the exigencies of the hour. Generally with a view of securing a better grip upon the taxpayer has the Legislature taken this problem in hand, and one after another those ingenious expedients have been devised which now inflict so serious a loss upon the public, and such grievous annoyance from time to time upon individuals. But the course of legislation has not been by any means uniformly in this direction. Thus in 1815 an exemption was made in favour of the vendors of confectionery, and in 1833 a similar advantage was secured by the dealers in mineral waters.

The mischievous operation of this tax, which has led to its repeal in these instances, is by no means confined to the particular industries which have received relief. On the contrary, it is rooted in the nature of the tax itself, and affects, and must affect, any industry which is made to contribute. A cynic may, indeed, rejoin that, so far as the majority of proprietary medicines are concerned, it would be no public loss if they were affected to the point of being kept out of the market altogether. There would be much truth in the observation, for the undiscriminating administration of nostrums on the faith of an advertising puffer, is a most pernicious practice. But, unfortunately, the tax does not make such medicines unpopular. On the contrary, the Government stamp directly and powerfully conduces, among the more uninstructed classes of society, to a belief in the soundness of the medicament to which it is affixed. The duty does not come out of the manufacturer's or vendor's pocket, but out of his customer's; and the circumstance that he has to pay the duty in advance enables him to invest money which shall pay him the full return of his ordinary business profit without incurring the smallest risk or trouble in turning it to account. This is where the mischief creeps in. The public does not want medicine, as it does mineral waters, in bulk. The high price, therefore, to which it is driven up by the duty is not a matter of prime importance; but it is of great importance to the taxpayer that he is required for every 6*d.* that he pays in to the national exchequer to pay 1s. or 1s. 6*d.* to a number of intermediaries whom the method of collection adopted in this instance interposes between himself and the Revenue Department. This is an evil more serious even than the great hardship which arises to individuals who innocently offend in ignorance—an ignorance to which the habitual attitude of the Revenue authorities largely contributes, when these latter arouse themselves, as they occasionally do, and go forth seeking whom they may devour. The produce of this

tax is so inconsiderable, having never reached in the gross so much as £200,000, that it might easily be provided for by some quite unobjectionable alternative when the Budget is being arranged, and we hope that those most directly interested will take care that this is brought prominently to the notice of the Government upon the first opportunity.

Annotations.

"Ne quid nimis."

THE PRIVILEGES OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

IT seems to us impossible for the present agitation against the Council of the Royal College of Surgeons to cease until the Fellows of that College have their privileges much extended and the Members also have their just claims recognised. A meeting of the Association of Fellows will be held to-day (Friday) at 36, Grosvenor-street, W., at 5 P.M., in furtherance of these reforms. What are the privileges of the Fellowship of the College of Surgeons of England? Remarkably few. 1. A Fellow possesses a recognised professional status for candidature at a public hospital. 2. He may be elected as a member of Council in his own College. 3. He may vote at an election of members of Council. Now a schoolboy can look up in Latham's Dictionary of the English Language the definition of the word "*Fellow.*" He will find it to be, "*Member with full rights and privileges of a corporation.*" It appears to us that Fellows of the Royal College of Physicians of London do really enjoy full rights and privileges of a corporation; for the whole management of the College of Physicians is vested in the Fellows, their Council being an executive and not an initiative one. The Fellow of the College of Surgeons is ridiculously far behind. Even at the annual meeting of his own College, he may attend, probably speak, but not give an effective vote. He has delegated his whole duty to the Council of his College; giving them a free hand, while his own are tied. His representatives may act as they please, and are absolutely irresponsible to their constituency during their term of office. This total absence of power of control over the Council of the College of Surgeons, as well as over the general management of their College, is felt to be a real grievance, which might well be remedied by putting a Fellow of the College of Surgeons on a level with a Fellow of the sister College of Physicians. At present a Fellow of the College of Surgeons holds a rank about corresponding with that of a Member of the College of Physicians; with the exceptions already given, he is outside the College, and takes no part in its management whatever. This is a confession to be made with feelings of humiliation. An increase in the power and collegiate status of a Fellow of the College of Surgeons would be a most powerful incentive for Members to seek the higher title of Fellow, and we admire the spirit of liberal conception pervading the elevation of a Member of the College of Physicians to that of Fellow. We trust, for the true interest of the College of Surgeons, that such moderate reforms may be carried. It is but natural that the artisans who select any machinery should regulate the works. Many Fellows are reluctant to associate their names with a College adopting such a narrow and antiquated policy as prevails at Lincoln's-inn-fields, nor are they in the frame of mind to recommend coming men in surgery to subject themselves to the non-yielding discipline of the Council after submitting to their examinations. The "hall mark" of the College is a recognised one, but nowadays men look for both good training prior to their examinations and liberal treatment after becoming Members or Fellows, instead of simple subjection to the stamp of the assayer. We would remind our readers that the annual meeting of Fellows and Members will be held at the College on Thursday, November 1st, at 3 P.M.

MORTUARIES.

ALLUSION has been made in previous issues of THE LANCET to the defective state of the mortuaries in some of our larger towns and cities, as well as those of more rural districts. What is virtually the public mortuary of the large and wealthy city of Liverpool is a mere shed, partly of bricks, partly of wood, with a supply of cold water only, and no other conveniences whatever. At the recent inquest on one of the Whitechapel victims, Mr. Phillips, the divisional police surgeon, spoke in the severest terms of the state of the mortuary in which he had been required to make the post-mortem examination; and from the observations which were made by the coroner and jury it would appear to have been most unsuitable for the purpose of a mortuary pure and simple, especially so for the important object of a medico-legal inquiry. Still more recently comes a complaint from Walton, which is now rapidly becoming a very populous northern suburb of Liverpool. The body of a man was found in Anfield cemetery under circumstances which left no doubt that he had committed suicide by some corrosive poison. The body was removed to the mortuary, and a post-mortem examination was made by Mr. Anderson, who thus described the place: "It was dirty and filthy, and if the whitewash were touched it came off. There was no arrangement by which water could be obtained, and consequently the floor and table were left covered with blood and not in a condition to be seen by the jury. In the interest of common decency it should be altered." It appears that the mortuary belongs to the local board, who had been appealed to by Mr. Anderson, but had done nothing. The foreman of the jury stated that £50 had been spent on the place, and Mr. Anderson added that a proper water supply was all that was required. These facts reflect much discredit on the local sanitary authorities, especially when it is borne in mind that they not only have power to provide and maintain a mortuary out of the public funds entrusted to them, but that they could be compelled to do so by the Local Government Board. They cannot plead ignorance of what is required, or expense, in extenuation. Experience could be obtained from any modern workhouse, hospital, or infirmary; the expense, even including first outlay, would be comparatively small. They are also empowered to provide proper places for the reception of bodies during the performance of a post-mortem examination. It cannot be tolerated that the bodies of human beings should be relegated to places which would be condemned as unfit for slaughterhouses for cattle, and which present every appearance of "make-shift." Many will remember the scandal which was created some years ago, when a gentleman of good position occupying an important position in Somerset House died suddenly at his post, and his body was removed to the mortuary then existing in the churchyard of St. Mary-le-Strand. This was a wooden structure thoroughly unfit in all respects as a shelter for the dead, while it was only with the greatest difficulty that the surgeon who was ordered to make the necessary examination could do so. The scandal thus caused led to a new and improved condition of things. In former years, when railway accidents were treated with indifference, hopes used to be expressed that a bishop might be among the victims of the next accident so that an inquiry might follow. Are we to wait for the death of another Government official under similar circumstances, or of a member of some local sanitary board, before proper

mortuaries are provided? We might plead for some regard on behalf of the medical practitioners, whose health is seriously involved in the discharge of their duties under such unfavourable circumstances. But we would prefer not to narrow the issue to such limits, nor to speak of the coroner's jury and other officials, who are compelled to visit mortuaries, however bad they are. Respect for the dead is a feeling which is shared by all, from the highest to the lowest, and it is this feeling which should prompt the erection and maintenance of proper mortuaries and post-mortem chambers wherever they are now wanting.

MEASLES AND SCHOOL CLOSURE AT BOOTLE.

THE epidemic of measles at Bootle is extending, and its extension appears, in the main, to be due to two causes. In the first place, the sanitary department of the Council have decided to withdraw the fee formerly paid for a voluntary notification of infectious disease, and they are therefore now in the position of not being able properly to control the movements of children living in infected houses. In the second place, and as a natural consequence, certain elementary schools are centres of infection; and, if the information we have on this point is correct, there is a distinct misapprehension on the part of the Town Council, as sanitary authority, as to their duty and powers in this matter. It is stated that the Board School managers have arrived at the conclusion that if the schools were closed the children would meet in the streets and play there, and that they may therefore just as well continue their attendance at school. There is no question that consideration should always be given to such a subject before school closure is decided on; but the decision does not rest with the school managers; on the contrary, it is for the sanitary authority, who have the power of ordering the closure, to seek skilled advice on that and other points from their medical officer of health before they act. Such an adviser would doubtless bear in mind that, with respect to some infectious diseases, experience has already shown that, under circumstances of aggregation very akin to that obtaining in schools, they acquire a special potency for mischief and for spread, and the degree of danger attending the maintenance of such aggregation, as opposed to the risk of play in an unlimited amount of moving air, would in every case of contemplated school closure be duly considered. But when once the sanitary authority have decided to close the schools on the advice of their health officer, the school managers are bound to comply with the order, even if they determine on an appeal to the Education Department.

THE ISLINGTON MEDICAL SOCIETY.

THIS Society held its first meeting for the session on Tuesday at 1, Highbury-place. The attendance was good. The principal feature of the evening was an address by Mr. Henry Power on the therapeutics of the more common diseases of the eye. Mr. Power ran over the list of such affections. He expressed his attachment to the old and classical treatment of specific iritis, which, indeed, continues to hold its ground, in spite of all changes of practice, with all practitioners that realise their responsibility and the value of eyes. On the other hand, he confessed to an entire revolution in the treatment of ordinary catarrhal conjunctivitis in its acuter forms. The old strong solutions of nitrate of silver had disappeared from the ophthalmic surgeon's table, and even the vinum opii, and had given place to soothing treatment, especially to weak solutions of cocaine, one or two daily applications of which conferred immediate relief and soon cured. Mr. Power expressed somewhat strongly his preference, in most cases of disease of the lacrymal sac, of soothing and medical measures over surgical procedures, which were often unsuccessful, and sometimes worse than that. Even in the hands of ophthalmic surgeons probing the lacrymal duct and other such operations required to be done with much care. Being asked his opinion as to the performance of iridectomy as a preliminary to cataract operations, he said he had, as a rule, abandoned it. He warned his hearers against the careless use of atropine in patients over fifty or with any glaucomatous tendencies, and eulogised the action of eserine in such cases.

SENSITIVE DENTINE.

ONE of the difficulties to be overcome in tooth filling is the occasional extreme sensitiveness of the dentine; and it requires considerable courage on the part of the patient to submit to the necessary cutting. Healthy dentine is endowed with but little sensibility, for if a tooth be accidentally chipped so as to expose a portion of the dentine without opening the pulp chamber, it can at first be touched without giving rise to pain, but after twenty-four hours' exposure to the fluids of the mouth it becomes irritable. Hyperæsthesia of the dentinal fibrils may follow any form of exposure—that due to caries, erosion, or fracture; and when present it varies considerably in intensity, not only in different teeth but in different parts of the same tooth. Immediately under the enamel, in proximity to the pulp, especially the fibres radiating from the cornua of and just beneath the appreciably softened carious bone, are the situations of greatest sensibility. The two former are explained by anatomical facts. The dentinal fibres end at the periphery by forming a dense network, and open into the so-called inter-globular spaces, which, however, are filled with protoplasm similar to that contained in the lacunæ of bone, the whole forming the granular layer of Tomes, and near the pulp the fibrils are both more numerous and of larger calibre. The deepest portion of the diseased bone is probably most sensitive, because here the calcareous material has been removed, exposing the fibrils, while it has not gone far enough to destroy them. It will readily be understood from this that superficial cavities are often very sensitive; then, as the disease progresses and this portion of the dentine is destroyed, there comes a time when there is but little pain from contact with acrid fluid or solid substances, but acute sensitiveness is again met with as the pulp is approached. Other things being equal, soft teeth, from their relative greater quantity of organic matter, will be more sensitive than hard teeth, although there are many exceptions to this rule; also the teeth of the young more than those of the aged. The various methods of treatment may be summed up under the following heads: (*a*) operative measures, (*b*) desiccation, (*c*) cauterisation, (*d*) local anæsthesia; and this is probably the order of their efficiency, although combinations are often valuable. (*a*) Sharp instruments, rapid motion of the engine, and taking advantage of anatomical knowledge by cutting away from the pulp and its cornua and across the line of the fibrils, will suffice in most cases. After the insertion of a temporary plastic filling for a few months, it will generally be found that most of the sensitiveness has disappeared; and this is the best of all treatment if the patient is under constant supervision. (*b*) In order to get thorough dryness, the rubber dam must be adjusted and the cavity swabbed out repeatedly with cotton wool dipped in $CHCl_3$ or absolute alcohol, or, better still, a current of hot air passed through the cavity. Chloride of zinc acts partly as a desiccator and partly as an escharotic, but its application is usually very painful, and its use contra-indicated when the pulp is near. (*c*) Carbolic acid, chloride of zinc, nitrate of silver, and caustic soda all have their advocates—carbolic acid, perhaps,

being the most general favourite. Arsenious acid left in for a few hours is most efficacious, but, owing to the numerous cases of death of the pulp resulting, is now rarely resorted to. (*d*) Cocaine alone, or in conjunction with sulphuric ether, although of great use as a local anæsthetic in treating pulps, has not proved of much service for sensitive dentine, as it is not readily absorbed. Other drugs, such as menthol and aconite, are equally disappointing. Dr. Ottolengui's method seems, as far as experience has gone, to give good results. He first dries the cavity with hot air, and sometimes uses carbolic acid as an escharotic, and then anæsthetises the dentine with ether spray. It is maintained that the pain produced is far less than the operation of cutting by any other method. It may be interesting to note the statement that, where teeth are forcibly wedged apart for the sake of gaining room for filling, the pain of excavating is much diminished, presumably from constriction of the nerve as it enters the apical foramen. Cocaine injection into the gum, as used for extractions, has also been recommended, but has not given encouraging results.

GREAT ANTI-SWEATING DEMONSTRATION AT GLASGOW.

AT the City Hall, Glasgow, a large meeting has been recently held for the purpose of urging the Town Council to apply practically some of the remedies we have advocated as likely to mitigate the evils of the sweating system. Dr. Charles Cameron, M.P., occupied the chair, and urged that THE LANCET reports on sweating had justified the extension of the House of Lords commission of inquiry to the provinces. Mr. Neil McLean, speaking on behalf of the Scottish Tailors' Society, declared that they were ready to endorse and prove the accuracy of THE LANCET reports on sweating at Edinburgh and Glasgow. With the single exception of wishing to restrict, by some legal enactment, the immigration of unskilled pauper labour, all the remedies he advocated were identical with those urged in these columns. Miss Clementina Black, representing the Women's Trade Union League, related how in London she had seen women employed at embroidery work on Government uniforms. This was a skilled trade, and yet these women only earned 1*d.* per hour. No greater social injury could be inflicted than that which resulted from the reduction of wages. Insufficient wages led to every form of degradation and crime. But in this the buyers, as much as the employers, were to blame, and the public should form associations pledged to purchase only from such shops as were proved to pay the workpeople employed sufficient wages for them to live healthy and respectable lives. One of our Special Sanitary Commissioners, who was present as our representative, was then invited to speak. He pointed out that in Glasgow, under the same roofs, some apartments were let out for purposes of debauchery and others employed as sweating dens. Sweating, crime, and debauchery went hand in hand in the city. They could not expect women to be healthy, respectable, and virtuous on 4*s.* or 5*s.* a week. It was for the Town Council, as the custodian of public prosperity, to set the good example by building wholesome model workshops, and insisting, in all town contracts, that a just rate of wages should be paid. The laws of health, the laws of humanity, were higher than the laws of supply and demand. This, in any case, had been fully realised by the Paris municipality, and our Commissioner read the text of the Paris bye-law, abolishing the sweating system, imposing a nine hours day, and stipulating that the highest rate of wages prevailing in the various trades concerned should be paid for all work done for the town. Other speakers spoke in the same strain. The greatest unanimity and enthusiasm prevailed throughout, the resolutions, including a vote of thanks to THE LANCET, were carried without the slightest opposition, and on all sides the warmest feelings of satisfaction were manifested whenever allusions were made to the active campaign which we have undertaken against the sweating system.

RHYTHM OF MUSCULAR RESPONSE TO VOLITIONAL IMPULSES IN MAN.

As a guide to the mode of action of the cerebral and spinal motor centres the observations of Mr. W. Griffiths in the *Journal of Physiology* follow on those of Messrs. Schäfer and Horsley, and are of great physiological and some pathological interest. The waves seen in a myogram taken from a voluntarily contracting muscle are graphic representations of contraction, and are not due to mere vibration. The number of waves per second in the muscle tracing varies in different individuals. The average number of waves per second in a myogram of the biceps muscle is greater than that of the muscles of the ball of the thumb contracting voluntarily in the same individual, the weight in the former case being held in the outstretched hand, in the latter suspended from the first phalanx of the thumb. The number of muscular responses per second in a voluntarily contracting muscle has been found to vary from eight to thirteen when the muscle is not made to overcome any force external to the body. This range of variation is probably too wide, the higher numbers being due to resistance offered by simultaneous contraction of antagonistic muscles. The average number of muscular responses per second in a voluntarily contracting muscle varies with the weight lifted. There is a gradual increase in the number of responses as the weight is increased up to a certain maximum number; any increase in the stretching weight beyond this point is accompanied by a decrease in the number of the responses. The average number of responses varies with the time during which contraction lasts. Increased activity produces an increase up to a certain point, then a decrease; and this phase of decrease is in most cases accompanied by consciousness of fatigue. The number of responses presented by an unweighted muscle, and the same muscle in a state of *dead strain* contracting voluntarily, is fairly constant, and is the lowest number of responses obtained from a voluntarily contracting muscle. The myogram waves become more extensive as the muscle becomes fatigued.

DEATH CERTIFICATES AND UNQUALIFIED ASSISTANTS.

IT is a constant cause of surprise to us that medical men continue to get into trouble through the employment of unqualified assistants, or through using them in a wrong way. The last instance in point is one in Oldham, where Dr. James Gledhill and his unqualified assistant have both been summoned before the police court in connexion with a certificate of death in the case of a child named Shaw, seen during life only by the assistant, and that only once. The statements made and apparently admitted at the first hearing of the case were that the father went for this certificate, and the assistant filled in one already signed by Mr. Gledhill. The assistant pleaded guilty. It was further stated at that stage that Dr. Gledhill was in the habit of signing blank certificates of death, and that when he went away in August these were left for his assistant or anyone to use, and that his assistant did use them. On the second hearing, Dr. Gledhill having meantime been summoned for aiding and abetting, counselling, and procuring the other defendant to make a false certificate, the assistant withdrew the statement that he had used a certificate signed by his principal,

and said he had signed Mr. Gledhill's name himself—"He put Mr. Gledhill's name to it." Dr. Gledhill explained how, for his own convenience, he kept certificates ready signed, and how, when the Registrar wrote to him about this particular case, he (Dr. Gledhill) believed that the assistant had taken accidentally one of these signed certificates. The assistant explained the discrepancy between the statements on his first and second appearance on the ground that he was flurried. The magistrates dismissed the case as regards Dr. Gledhill, but they regarded the case of the assistant as a very bad one, and fined him £5 and costs. The fine and costs together amounted to £8 18s. The lesson of the case is to confirm the warnings so repeatedly given to all unqualified assistants and their principals. We entirely accept Dr. Gledhill's statement that he signed his certificates for readiness and convenience merely. But we can no more approve a medical man signing a blank certificate than a blank cheque, and the latter might, in easily imaginable circumstances, be the less dangerous proceeding.

SACCHARIN.

THE true position of saccharin is becoming somewhat hard to define. Its employment in the preparation of many substances liable to duty has already been prohibited, but this course of action was quite compatible with the possession of the most harmless properties. In a recent text-book on therapeutics, the author, when dealing with saccharin, appended the following disparaging foot-note: "The present is probably as good as any other place in the book to notice a substance whose use in practical medicine depends upon its lack of medicinal properties." Still of late there have appeared several paragraphs in various journals referring to the report of a commission of Paris doctors, and their adverse verdict has already served to disquiet many diabetics, who had hitherto placed full confidence in saccharin. In the abbreviated form in which it has reached us, this report does not amount to very much. It starts with the assumption that saccharin is antiseptic; but this fact rests upon a very slender foundation—its power of retarding putrefactive changes in the urine eliminated during its employment. The main conclusions of the French commission are that it seriously troubles the digestive functions and increases dyspepsia, and should be prohibited as an article of food. These statements are not in accordance with those of very many previous observers, who have studied the action of saccharin, and found it to be mainly negative. Large quantities have been taken by men, and have been administered to animals, without causing any symptoms of any kind. The report merits attention, although it is so widely at variance with previous experience that it seems probable that some oversight has led to these conclusions.

HOSPITAL VISITING.

EVERYTHING which tends to bring forward an appreciative acquaintance with the work carried on in our hospitals serves a good purpose in making known the needs of these institutions. The order and cleanliness displayed in the wards, the number of urgent cases always ready to fill available beds, and the mute eloquence of wards closed from lack of funds, appeal strongly to those visiting a London hospital for the first time. Visits of inquiry, visitors who come to see and to learn, are always welcome, and one of the residents, the matron, or the secretary, will probably be ready to walk round the wards with those who care to come. Against a phase of "slumming," however, in accordance with the lines indicated by a writer in the *Queen*, our hospital authorities are likely to protest. They do not want their time to be occupied by "some queen of fashion" on whose hands the "day hangs heavily"; for them the "lovely face bent on atonement" possesses no charms unless it comes to do work in the wards, or to leave an additional name upon the roll of subscribers. The presence of the sick should rebuke those who, for a fashionable craze, take up hospital visiting as a cleanly form of "slumming." The languid curiosity of idle people may be turned into interest by the "refined manners and gracious bearing" of the matron, but our "ladies of fashion" are in the way unless their attentions extend beyond flattering words and a "triumphant march." It is otherwise with those who come to offer their services to read to the sick or to visit them on the regular visiting days. The sense of loneliness is intensified when the waifs and strays see "friends" going to other beds and know that it is hopeless for them to look for visitors. On these visiting days there is undoubtedly room for additional workers, but their work must be of a self-effacing character. As a fashionable occupation hospital visiting is open to objection. Those who take up such serious work from such unworthy motives are likely to find themselves extremely out of place and to receive many rude shocks.

SCOTTISH BRANCH OF THE QUEEN VICTORIA NURSES' INSTITUTE.

TO provide nurses for the sick poor in their own homes is no new idea in Scotland, and many agencies exist throughout the country for this purpose. Some of these train the nurses they have engaged specially in district work before they become staff nurses; others assume that hospital training is sufficient. A greater amount of training and of self-reliance is, however, essential in an efficient district nurse than in an average hospital nurse, because the former has not the advantages of the latter in the way of appliances and constant medical supervision, and the trustees of the surplus of the Women's Jubilee Fund have decided to devote £300 yearly towards a Scottish branch of the Queen Victoria Nurses' Institute, with a central training home in the Scottish capital. This sum, however, which, considered by the standard of population, is over the proportion that Scotland might expect, is insufficient for the purpose, and it is obvious that, if a separate branch is to exist, the scheme must be supported by the assistance of the public. An appeal for this assistance has now been issued, and as soon as a suitable house is found, and funds provided to fit and furnish it, a small staff of nurses will be engaged, and the home opened to receive probationers for training in district work. It is also hoped that hereafter, if the funds sufficiently increase, the Scottish committee may be able to grant sums of money towards the first establishment of local homes, when the districts cannot afford the whole expense of supporting the nurses.

THE MEDICAL SESSION IN ABERDEEN.

AT the opening of the session, Professor Struthers met with a very hearty reception from a class believed to be the largest yet seen in the school. After a feeling allusion and a high tribute to the great loss of the school by the retirement of Professor Brazier, he dilated on several subjects. He rejoiced over medical bursaries in the University now worth £700 a year, and over the progress made in providing suitable laboratories for the school. He spoke with gratitude of the response of Government to their appeals. He referred to the delay in the extension of the infirmary buildings, and, with that fine belief in everything Scottish for which the Professor is famous, complained especially of the managers, "believing in London architects instead of Scotch ones." The only English thing Professor Struthers believes in is students from England, and he thinks it very

good for them to go to Scotland, and especially Aberdeen. And it must be admitted that he takes good care of them, and gives a good account of many that do repair to that seat of learning. In the class of Materia Medica, Professor Cash spoke, as he was entitled to do, on the unreasonableness of the disbelief in medicine. He vindicated the power of medicines, and insisted on the responsibility of medical students for acquainting themselves with all agents and resources for the cure and relief of suffering.

DEATH "ACCELERATED BY DEFECTIVE DRAINAGE."

AT an inquest held last week the jury returned a verdict that the deceased had died from pleuro-pneumonia accelerated by defective drainage, and the circumstances are of sufficient public interest to induce us to comment on it here. Offensive smells were observed in a house in Battersea, and the landlord's agent having been informed of the matter, he sent a man to cleanse the drains, and this man left some of the refuse in the yard. Two boys living in the house were affected with sore throat, but no serious illness occurred. The nuisance, however, continued, and on four separate occasions the drains were taken up, but each time without beneficial result. The house was therefore vacated on October 5th, and three days later the deceased, who was three years of age, became ill and died. An examination of the house drains showed that the drainage system was combined with that of the adjoining house, that they were in direct communication with the sewer, that they were only jointed with clay, and were unevenly laid. The jury censured the landlord's agent for not sending competent men to do the work, but exonerated the parish authorities from all blame in the matter. We have no reason to be dissatisfied with the verdict that death was accelerated by the conditions described; there is, indeed, much reason for believing that pneumonia may be caused by such unhealthy surroundings; but it will be interesting to know whether the District Board have exercised their powers under Section 82 of the Metropolis Local Management Act for ascertaining if the drainage of the house was in accordance with the requirements, and whether they have taken any steps, in accordance with Section 83 of the same Act, for the infliction of a penalty on the person who has improperly made or altered the drains. Unless these powers are exercised, the inhabitants of Battersea will have no promise of security against similar occurrences in the future. It would not be amiss to ask whether any regulations as to house drainage exist in Battersea.

THE EPIGLOTTIS IN ASPHYXIA.

THE paper read by Dr. Benjamin Howard at the last meeting of the Medical Society of London raises again the important question of the best means to adopt when respiration fails under an anæsthetic. Dr. Howard maintains that the chief cause of the difficulty is the falling back of the epiglottis over the laryngeal orifice, and that the only way of obviating this is by extending the head and neck, the method of drawing forward the tongue being generally useless. These conclusions are not entirely in accordance with the results of previous observers, nor, we think, so far as lingual traction is concerned, with the experience of the majority of those engaged in the practical administration of anæsthetics. Sir Joseph Lister so long ago as 1861 pointed out that the profound stertor of chloroform inhalation depended upon a laryngeal cause, the epiglottis not being folded back during the obstruction, and, though traction on the tongue abolished the obstruction and stertor, it did not in the least degree move the base of the tongue, epiglottis, or hyoid bone. Hence he believed that the benefit of lingual traction was not to be explained mechanically, but was developed reflexly through the medium of the nervous system. And in 1870 he referred to the value of forcibly pushing up the chin in cases where the tongue had fallen back. Since then the necessity both for elevating the chin and drawing forward the tongue has been frequently insisted on—the evidence, indeed, in favour of the latter practice being especially strong. The discussion of this most interesting subject has been deferred to a future meeting, when it is hoped that evidence on these points from those actively engaged as anæsthetists will be forthcoming.

MANCHESTER AND SALFORD.

IT is eminently satisfactory to learn that the prospect of the administrative union of Manchester and Salford is improving. A meeting was recently held in Manchester to promote the proposed amalgamation, at which the report of a committee of inquiry was presented. This report expresses the opinion of the committee that amalgation would not only reduce the cost of administration, but also tend to secure greater efficiency; stress being laid upon the facts that the population of the two urban sanitary districts is strictly homogeneous, and that they are only divided by an obscure and essentially arbitrary boundary line. From a sanitary point of view it is not easy to overrate the drawl backs to efficient administration due to the dual system of government, or the advantages that may be expected from amalgamation, quite apart from the obvious economy of the proposed union. Under the recently passed Local Government Act both Manchester and Salford are created county boroughs, but there would appear to be no obstacle in the way of their union as one county borough. Manchester and Salford united would have an estimated population of 604,500, and would thus rank as second only to London among the largest towns of the United Kingdom, even if opportunity were not taken to still further enlarge the county borough by adding to it some of the surrounding and contiguous urban sanitary districts, which are merely suburbs of Manchester. The death-rate during last year was equal to 28·7 per 1000 in Manchester, and did not exceed 22·2 in Salford, the rate in the city and borough combined being 26·0. Without doubting that amalgamation would lead to more efficient sanitary administration in the combined county boroughs, it is beyond question that the death-rate in Manchester has been somewhat over-stated by its separation from that portion which has hitherto had a separate municipal existence, and which contains its most rapidly increasing suburbs.

CANADIAN MEDICAL ASSOCIATION.

THE twenty-first annual meeting of the Canadian Medical Association has recently been held at Ottawa (*Canada Lancet* for October), Dr. G. Ross, of Montreal, presiding. At the first day's proceedings Dr. Girdwood, of Montreal, drew attention to the question of registration in Great Britain, and suggested the appointment of a committee to inquire and report upon what terms reciprocity of registration may be obtained between the different provinces and the mother country, and other colonies. The President, in the course of his address, advocated the establishment of a Dominion annual register at Ottawa. Dr. F. J. Shepherd of Montreal read a paper on Recent Advances in Surgery; and in the sections papers were read by Dr. T. W. Mills of Montreal, on the Influence of the Nervous System on the Nutritive Processes; Dr. Alloway of Montreal on Emmet's and Schroeder's methods of operating upon the Cervix uteri; Dr. Howard of Montreal on Ophthalmoplegia externa, and others. It was decided to hold the next annual meeting at Banff Springs.

THE RIGHTS AND DUTIES OF MEDICAL OFFICERS OF HEALTH.

A DISPUTE having arisen at the Rawmarsh Local Board meeting regarding some of the duties of the medical officer of health, notice has been given to the effect that at the next monthly meeting the following resolution will be moved: "That the medical officer of health be requested not to enter any house as medical officer merely because of the existence in it of an infectious case which is attended by another medical man, and that he leave the disinfection of such houses to be ordered by the medical attendant; or if ordered by himself, then only after communicating with that attendant." We regret that anyone should have thought it necessary to move such a resolution, for, whilst it embodies certain principles which medical officers of health will fully endorse, it at the same time would be likely to hinder some of the most important work which a medical officer of health has to do. Speaking generally, we may state that where infectious disease is present in any house or premises, the medical officer of health has primarily to do with the local circumstances with which the disease is associated, and the medical attendant has primary concern with his patient. No medical officer of health can fulfil his duty to the public or to his authority if he neglects the investigation of local circumstances favouring disease, and it must necessarily be for him to judge whether on such a point he can accept and endorse the views of the medical attendant or not. Therefore to order that a medical officer of health shall not enter any house merely because of the existence in it of an infectious case would be to instruct that officer to neglect one of his most essential duties. It is perfectly true that the medical officer of health has no legal right of entry on any premises merely because of the existence there of an infectious fever, but householders and occupiers are, as a rule, quite willing to admit such an officer, in order that causes of disease, if found, may be abated, and medical pactitioners are, almost without exception, ready to co-operate with them in such work. As to the disinfection of infected premises, this can rarely be done in a thoroughly satisfactory manner by occupiers unaided by the local sanitary staff; and whilst it is a rule, which is generally observed, that a medical man attending any case should be consulted as to the time and circumstances for performing such work, it is rare to find that medical practitioners care to take upon themselves the responsibility for such work. If they do, the medical officer of health is almost invariably satisfied to leave it to them; but cases may, at times, arise in which he may have a different duty in the matter. The observance of the most ordinary professional courtesy should do away with the necessity for passing any such resolution as that referred to, and it is to be hoped that no more will be heard about it.

HOSPITAL PROVISION FOR DIPHTHERIA.

WE learn that at the last meeting of the Metropolitan Asylums Board a letter was read from the Local Government Board announcing the intention of the latter authority to introduce into Parliament a Bill which shall make it clear that the managers can deal with diphtheria, and adding that, if in the meantime the managers determine to admit such cases into any hospital under their control, the Board, with the view of removing any difficulty with the auditor, would be prepared to sanction any expenditure incurred in the treatment of such cases which in the opinion of the auditor was not open to question otherwise than on the ground referred to. We understand that the medical superintendents of the different fever hospitals have been communicated with, and that they have replied that they can accommodate persons suffering from this disease. There is, therefore, no longer any obstacle in the way of the immediate admission of cases of diphtheria into the hospitals of the managers, and all that remains is for the Asylums Board to make the necessary arrangements. We presume that the managers have satisfied themselves that from a public health point of view the step which is about to be taken is desirable.

METROPOLITAN SEWAGE DISPOSAL.

THE Inaugural Address of the President of the Society of Medical Officers of Health, an abstract of which we publish on another page, once more raises the subject of metropolitan sewage disposal. Dr. Corfield's address is of especial interest at the present moment, because a new body is about to be created to take over the duties of the Metropolitan Board of Works; and one of the first and most important questions with which they will have to deal is that which he discussed at some length before the Society last week. Dealing with the subject in a comprehensive way, he reviewed the results of past inquiries as to the best method of disposal of sewage, and showed that the experience of the past, an experience which may safely guide in the future, pointed to the purification of sewage by its application to land. This view was forcibly expressed by the Commission on Metropolitan Sewage Discharge; but, as is well known, the recommendation of this Commission was not accepted by the Metropolitan Board of Works, who felt themselves unable to concur in the conclusions at which the Commissioners had arrived. Instead of at once adopting the course recommended by the Commission, they have sought the advice of Sir Henry Roscoe as to the best methods of deodorisation, and have made permanent arrangements for discharging the effluent directly into the river. Sir Henry Roscoe, however, has told them that the use of deodorants ought only to be regarded as a temporary expedient, and that he feels convinced that sooner or later the recommendations of Lord Bramwell's Commission will have to be adopted, and that the sewage, whether previously clarified or not, must either be filtered through land or discharged into the estuary at a point not higher than Sea Reach.

There is, therefore, complete concurrence of every competent opinion as to the method which London requires, and the persistent expenditure of public money in the construction of works which must eventually be abandoned deserves more than verbal censure. It is with a feeling of relief that those Londoners who have studied this matter look forward to the creation of the County Council in supercession of the Board that has been guilty of this reckless conduct. It is earnestly to be hoped that the County Council will not hesitate to reverse the policy of their predecessors, and we would recommend every would-be county councillor to carefully study Dr. Corfield's paper so as to be able to form an independent judgment on this subject. This, perhaps, is the more necessary seeing that the officers of the Metropolitan Board of Works are by the Local Government Act of this year transferred to the new London County Council.

NOCTURNAL INCONTINENCE IN CHILDREN.

NO investigation in etiology can be more complex than the attempt to find out the whole mechanism of causation in any given case of enuresis. M. Reymond, in *La Province Médicale*, No. 40, brings Cowper's glands into the list of causes of enuresis; he contends that these are in action even in infancy, and argues that erections with some mucous emissions are sufficient proof of their activity. Dilatation of the urethra is recommended with a view to remove the morbid state of irritability of the orifices of these glands. M. Reymond does better to recall attention to such reflex sources of irritation as preputial adhesions,

phimosis, and urethral lesions. In some cases the passage of a bougie in male children, or the swabbing of the inner surface of the bladder and urethra of the female with some astringent and antiseptic lotion, has effectually cured the annoying symptom.

THE MEDICAL OFFICER OF HEALTH FOR RUTHIN.

THE Ruthin Urban Sanitary Authority have acted towards their medical officer of health in a manner which deserves to be widely known. Dr. Lloyd-Roberts, who has been medical officer of health for the district since 1876, and has served it faithfully and well, resigned his office recently, so as to enable the authority to obtain from the Local Government Board a contribution towards his salary; his resignation and re-election were therefore matters of mere formality, and the one ought to have followed the other as a matter of course. A local practitioner, however, applied for the office and was elected, notwithstanding the efforts of the Mayor, whose conduct throughout the proceedings deserves commendation. An act of injustice of this kind cannot pass unnoticed; it is discreditable to the authority, and will be mischievous in increasing the already strong feeling of distrust which the profession feel towards the public health service. We consider the vacancy was merely technical, and Dr. Roberts as entitled to re-election without the slightest opposition. When we learn that "the Council had not been particularly pleased by the way in which Dr. Roberts had presented his reports," we are left under the impression that he had not hesitated to tell the truth. Ruthin, we judge from the speeches reported in the local journals, hungers for notoriety; the Town Council have certainly done their best to attain it. Whether it is of the kind they wish for it is for them to decide.

COMPULSORY ISOLATION IN GREENOCK.

AN important discussion took place at the last meeting of the Greenock Police Board when the minutes of the Public Health Committee were considered. Scarlet fever being somewhat widely prevalent in the town, it was asserted that the extension of the disease was in part due to the fact that, owing to the fear of compulsory removal to hospital, parents did their utmost to disguise the existence of infectious disease in their homes, instead of notifying it; and that, in consequence, children from infected houses continued their attendance at school and otherwise contributed to the spread of infection. From some of the statements made, it seems that, on the part of some parents, this attitude has been adopted; but, on the other hand, the powers of the authority are hardly in excess of those which they should possess. It was also explained by Baillie Anderson that, although compulsion in the matter of removal to hospital could only be exercised in cases where there was insufficient lodging and accommodation, and even then only on the warrant of a sheriff or two magistrates, he could not remember a single instance during the past three or four years in which they had had to apply for a warrant to enforce removal; whereas parents and the public made considerable demands on them to provide means of hospital accommodation for their sick children. There can be no question that the compulsory powers such as the Greenock authorities possess require very careful handling; but the statement of Baillie Anderson must be taken as disposing absolutely of the charge of cruelty which was advanced against the authority. On the other hand, it must be remembered that the isolation in question is only carried on in the interests of the public themselves, and that those who keep secret cases of scarlatina, and so distribute the infection amongst other children, are themselves guilty of a greater cruelty against those children and their parents than is at all likely to be brought about even by a somewhat excessive use of powers such as are in force at Greenock. Whilst it is important that nothing should be done to estrange the sympathy of the public in the great work of disease prevention which is in progress in our country, the responsibility of individuals towards their fellows in this matter needs to be firmly held in view.

ELECTRIC PROSTRATION.

SEVERAL cases of this new malady are reported from Creusot, France. It affects workers under electric light. The light exceeds 100,000 candle power, and it appears that it is this excess of light, and not the heat, which produces the nervous symptoms. A painful sensation in the throat, face, and temples is first noticed, then the skin becomes coppery red, and irritation is felt about the eyes; much lacrymation ensues, and these symptoms then disappear, whilst the skin peels off in five days. The effects are comparable to those produced by walking over fresh snow in the sunlight, and may be regarded as a sort of "sunburning."

SMALL-POX SCARE IN TORONTO.

OWING to a prevalence of small-pox in Toronto, a question has arisen whether sufficient precautions have been adopted to prevent importation of the infection from Buffalo. The weight of evidence goes to show that, in so far as vaccination is concerned, the authorities in Buffalo are acting in a manner that is satisfactory, and that in this respect they have not much to learn from Toronto.

GASTROSTOMY.

THE patient which Dr. James Murphy, of Sunderland, exhibited at the Glasgow meeting of the British Medical Association last August, who had the operation of gastrostomy performed on him on Sept. 9th, 1887, died on Oct. 15th, 1888, thus having lived for 402 days. Nothing has ever passed the seat of obstruction since two days before the operation. The immediate cause of death was a violent hæmorrhage from the descending aorta, which had been ulcerated into by a small opening from a mass of carcinoma about the size of a walnut, which had completely obliterated the œsophagus.

THE HARVEIAN DINNER.

THE revival of the Harveian dinner must be reckoned a distinct success. Rather more than eighty Fellows dined together in the reading-room, both town and country being well represented. After an entertaining anecdote connected with the "loving cup," the President gave the usual loyal toast in eloquent terms. Dr. Wilks proposed the "Health of the Harveian Orator, Dr. Latham," and, after a brief speech from the Senior Censor, Sir Alfred Garrod, the Fellows adjourned to the Library.

THE PECULIAR PEOPLE.

THE Peculiar People continue to act peculiarly and with much impunity, save in the loss of their children. The last instance is one, investigated by the coroner, of a child aged eleven months dying with convulsions. It had been ill from its birth. The poor woman who stood in the relation of mother to this unfortunate child told the coroner she had had twelve children, and eight of them had died before the age of three. They left everything "to the Lord." One of "the People" said that if they were in a ship with a hole in it they would "do the same." The jury thought it no use censuring the mother, and we fear they were right.

TESTIMONIAL TO MR. BARWELL, F.R.C.S.

AN interesting ceremony took place at Charing-cross Hospital on Tuesday of last week, in the presence of a large number of former and present students, who attended to show their esteem and respect for Mr. Barwell, F.R.C.S., who for over thirty years has been connected with the hospital. Lord Kinnaird, in the name of a large number of friends, colleagues, and former pupils, presented a handsome book-case to Mr. Barwell, who briefly and touchingly acknowledged the same.

DR. GAMALEIA AND CHOLERA.

IT is announced that the Paris Academy of Medicine has accepted the offer made by Dr. Gamaleia, of Odessa, to submit himself to experimentation in order to test the efficacy of his method of inoculation for cholera. We trust that his confidence in his remedy will be fully justified by the result.

THE Commission of Inquiry into the Sanitary Condition of Rotherhithe, conducted under instructions from the Home Secretary by Mr. Cubitt Nicholls and Mr. Shirley F. Murphy, held its first sitting this week. Mr. Reader Harris, as the representative of the Mansion House Council on the Dwellings of the Poor, was heard on the question of the necessity of such an inquiry, after which it was decided that before another sitting the Commissioners would examine the condition of the houses for themselves.

MESSRS. LONGMANS announce the publication this month of a new novel, by Dr. B. W. Richardson. The work, which is of a classical and historical character, is based on those events of the second century in which the Jews, long oppressed by the Roman yoke, tried to regain their liberty and their country under the leadership of a fighting Messiah called by them Bar-Cochbas, "The Son of a Star," from which the novel takes its name.

THE next Bowman Lecture will be delivered before the Ophthalmological Society at 11, Chandos-street, Cavendish-square, on Friday, Nov. 9th, at 9 P.M., by Henry R. Swanzy, M.B., F.R.C.S.I., of Dublin. His subject will be "The Value of Eye Symptoms in the Localisation of Cerebral Disease."

MR. JOHN MARSHALL, F.R.S., and MR. JONATHAN HUTCHINSON, F.R.S., have become Vice-Presidents of the Bethnal-green Free Library.

DR. ARTHUR W. EDIS has been elected an Honorary Fellow of the American Gynæcological Society.

GRIMSBY AND DISTRICT HOSPITALS.—The Earl of Yarborough, the president, occupied the chair at the annual meeting of the subscribers, held at the Town Hall on Monday. The annual report records the continued efficiency of the institution. The system (organised during the year) of "home nurses" had so far worked satisfactorily. The new wing to the institution, the gift of the Mayor (Mr. Alderman Henry J. Veal), is fast approaching completion. The year began with a deficit of £931. The Jubilee year afforded the committee an opportunity for making a special effort, by which they realised £1672. With this sum and a legacy they have received the debt had been discharged, and £759 added to the Endowment Fund.

VACCINATION GRANT.—Dr. Hutchison has, for the seventh time, received a first class award from the Local Government Board, for successful vaccination in the No. 1 district of the Chipping Norton Union, Oxfordshire.

Pharmacology and Therapeutics.

CASCARADYNE TABLETS (SANDELL'S).

These tablets are coated with chocolate, like tamar indien, but the taste of the concealed "cascaradyne" is by no means disagreeable. We have prescribed them in cases of chronic constipation due to anæmia or to habit of body, and have found them to effect their purpose satisfactorily. They contain cascara, senna, tamarinds, and prunes.

SACKER'S CASCARÆ SAGRADÆ APERIENT FRUIT LOZENGES.

These are prepared from the bark of the Rhamnus purshiana. Their taste is rather pungent, but spicy and aromatic. Several patients say that they like them, especially after dinner, as the sucking of them appears to improve digestion; if true, this can be easily explained on the circumstance that they act as powerful stimulants, at least to the salivary secretion.

SACKER'S COMPRESSED PELLETS.

We have prescribed the compressed pellets of terpin hydrate, cocaine, and compound cocaine; the last mentioned contain chloride of ammonium, chlorate of potash, and borax. The disagreeable taste of chloride of ammonium is well known; but these pellets are as little disagreeable as possible. These preparations are excellently made.

SCHIEFFELIN'S SOLUBLE COATED PILLS.

Pills of valerianate of quinine, iron, and zinc; of terpin hydrate; of Warburg's tincture, one pill representing one drachm of the tincture; of strophanthus tincture, one-twentieth of a grain; of aloin, strychnine, and belladonna, have been submitted to us. They are convenient and undoubtedly genuine preparations. The first-named pill has proved of service in many varieties of neurasthenia, hysteria, and epilepsy. Terpin hydrate is prescribed in chronic catarrhal conditions of the respiratory and other mucous membranes. The strophanthus pill is an excellent one, and the pill for chronic constipation has been proved by long experience to be a valuable combination. The convenience of the pills of Warburg's tincture is obviously great for travellers proceeding to tropical climates.

FLUID EXTRACT OF MANACA.

Manaca, or mercurio-vegetal, is the Brazilian name for Franciscea uniflora of the natural order Scrophulariaceæ. The fluid extract is said to be antisyphilitic, purgative, diuretic, emmenagogic, catalytic, and antirheumatic, especially indicated in syphilis, scrofula, meningitis, and rheumatism in any form.

PICHÉ.

The therapeutical parts of Fabiana imbricata are best extracted in a fluid medium, and this fluid extract has been prescribed with success in the treatment of renal colic, prostatitis, cystitis, and catarrhal inflammations.

CALENDAR OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

FROM the calendar of this institution, which has just been published by the Council, it appears there are 1122 Fellows of the College (of whom 703 obtained the Fellowship by examination, 10 were elected as Members of twenty years' standing, and 2 are *ad eundem* Fellows), 17,027 Members, 890 Licentiates in Midwifery, and 646 Licentiates in Dental Surgery. The holders of the diploma in Public Health (granted in conjunction with the Royal College of Physicians) number 6.

During the past collegiate years 735 candidates presented themselves in Elementary Anatomy and Physiology, 547 of whom passed in both subjects, 98 in Elementary Anatomy,

and 44 in Elementary Physiology; 46 candidates were referred in both subjects; 26 candidates presented themselves in Elementary Anatomy, 25 of whom passed; 113 candidates presented themselves in Elementary Physiology, of whom 80 passed and 33 failed. The examiners are appointed in conjunction with the Royal College of Physicians. The fees received from candidates for this examination amounted to £4166 2*s.* 9*d.*, the examiners receiving in fees £591 5*s.* Of 871 candidates who presented themselves in Chemistry, 568 passed and 303 were referred. Of 769 candidates who presented themselves in Materia Medica, 509 passed and 260 failed. The examiners in Chemistry and Materia Medica are elected by the Royal College of Physicians.

The examiners in Anatomy and Physiology for the Second Examination are appointed in conjunction with the Royal College of Physicians; they have conducted the Primary Examination under the old regulations, as well as the Second Examination of the Examining Board; 889 candidates presented themselves for examination in Anatomy, and 546 passed and 343 were referred; 881 candidates presented themselves in Physiology, of whom 519 passed and 362 were referred. The fees received for these examinations for candidates amounted to £4428 18*s.*, the examiners receiving in fees £1700 15*s.*

The Board of Examiners in Anatomy and Physiology for the diploma of Fellow, elected by the Council from the Fellows of the College, held during the past year two examinations; 137 candidates presented themselves, of whom 62 passed and 75 were rejected. The fees received amounted to £903, and the fees to the Board to £616 10*s.*

The Court of Examiners, elected by the Council from the Fellows of the College, conduct the Third or Final Examination in Surgery of the Examining Board, as well as the Pass or Final Examination under the old regulations, and the Pass or Final Examination for the Fellowship. During the year the Court has held two examinations for the Fellowship, and four for the Membership; at the former there were 88 candidates, 44 of whom passed and 44 were referred. For the Membership 862 presented themselves, of whom 473 passed and 389 were referred. The fees paid by candidates amounted to £11,055 9*s.* 6*d.*, and the fees paid to the Court of Examiners and the Examiners in Midwifery amounted to £5350 5*s.* 6*d.* The Examiners in Medicine under the Scheme for an Examining Board in England are elected by the Royal College of Physicians. Of 291 candidates who presented themselves for this examination during the year, 228 passed and 63 were referred. The Examiners in Midwifery under the Scheme are elected in conjunction with the Royal College of Physicians, and have examined 331 candidates, of whom 239 passed and 92 were referred.

The Board of Examiners in Dental Surgery has held three meetings for the examination of 43 candidates, 31 of whom received the diploma. The fees paid by them amounted to £325 10*s.*, the Board receiving £135 9*s.*

With regard to the finances of the College, it appears that the income amounted to £40,654 19*s.* 7*d.*, derived principally, as already shown, from the fees paid by candidates for the diplomas of the College—viz., £20,933 1*s.* 9*d.*; Erasmus Wilson Bequest, £11,899 12*s.* 1*d.*; sale of stock, £4637 19*s.* 4*d.*; rents from chambers adjoining the College, £1815 15*s.* 5*d.*; dividends on stock, £654 2*s.* 8*d.*; sale of calendar, trust funds &c., £714 8*s.* 4*d.*

The expenditure for the year amounted to £40,017 11*s.* 3*d.*, the largest item being £8398 9*s.*, fees paid to examiners, the next largest amount being for extension of College premises, £8152 7*s.* 11*d.*; salaries, wages, and pensions for officers and servants in the three departments, library, museum, and office, amount to £4699 14*s.* 6*d.*; taxes, rates, diploma stamps, and insurance absorb the sum of £1451 6*s.* 8*d.*; half expenses for Examination Hall, £2919 13*s.*; purchase of stock, £7518 15*s.*; Savoy estate, £1800 14*s.* 7*d.*; fees to Council, £318 3*s.* Under miscellaneous items, alterations and repairs, fuel and light, printing, stationery, trust funds, lectures, &c., about £5000 appears to have been expended.

PORT SANITARY AUTHORITY, CHESTER.—At a meeting of this authority, held last week at the Flint Town Hall, which was attended by representatives of the sanitary authorities respectively of Chester, Rhyl, Flint, Holywell, and Hawarden, it was resolved to take over the Mostyn Infectious Diseases Hospital, and to offer the Holywell guardians £100 for the building and its fittings.

DUBLIN MEDICAL SCHOOLS AMALGAMATION SCHEME.

A SPECIAL meeting of the Fellows was held on Tuesday, the 23rd inst., for the purpose of considering the scheme of amalgamation of the school of the College with the Carmichael and Ledwich Schools of Medicine; also the opinion of the law adviser and actuaries, and the observations of the professors of the College and of the proprietors of the respective schools thereon, and to consider any proposed bye-law having reference to the proposed scheme. The meeting was largely attended, about ninety Fellows being present.

After some preliminary observations, the President, Mr. Henry Fitzgibbon, called on the Secretary of Council to read the opinion of Mr. S. Walker, Q.C., on the proposed amalgamation. This was to the effect that, although the scheme did interfere with the tenure and emoluments of the existing professors, it did not alter the case that their position was bettered; he did not think they could put forward a claim for compensation, but the professors, if they chose, had a right to say they were professors until the first Tuesday in next May, and though the Council might then declare their offices vacant, their position could not in the meantime be altered without their consent. This was a right which any existing professor could enforce by injunction in the Court of Chancery. The President next called upon Mr. Thomson to lay before the meeting the scheme which had been formed by the Council and the bye-laws which had been adopted.

Mr. Thomson spoke of the importance of the subject before the meeting. It involved very radical changes in regard to certain institutions, which he believed would have a most important effect on the school of that College and a beneficial one on medical education, and moved the following resolution: "That the scheme now submitted by the Council to this special meeting of the Fellows, providing for the amalgamation of the Carmichael College and the Ledwich School of Medicine with the Royal College of Surgeons in Ireland, be and is hereby approved of, subject to such alterations as may be required to bring it into accord with the Charter and bye-laws of the College, and subject also to such being shown by the Carmichael College and the Ledwich School of Medicine as will be satisfactory to the legal advisers of the College."

Dr. Kidd seconded the resolution.

Professor Macnamara stated that the professors were not influenced in reference to their emoluments, but he objected on behalf of his professorial position, as the terms put before them and advised by Mr. Walker had not been carried out, and he therefore called on the Fellows to reject the scheme.

Dr. Robert McDonnell remarked that he was always of opinion that the school of the College was a sort of a log on the neck of the College, and he had aimed at setting it free from any connexion with the College beyond any other school. While alive to the many objections made, the scheme they had framed was the best they could lay before them.

Mr. Myles then moved, as an amendment, that before proceeding to consider the scheme a guarantee be asked from the proprietors of the Ledwich and Carmichael Schools that they were prepared to accept the scheme in the event of any or of all of their nominated candidates being defeated in the elections for the new chairs.

Mr. Hamilton seconded the amendment. He believed that the scheme should be referred back until the contracting parties had shown their willingness to join the scheme and their power to make the contract.

Mr. Corley said that Sir William Stokes had stated that Professor Stokes had been got rid of, but this was not the proper phrase; he had resigned voluntarily. The trustee of the Carmichael Schools, Mr. M'Donnell, had given permission to transfer the building and the prize fund to the school.

Mr. Lentaigne supported the amendment. He said the Ledwich proprietors had only consented to the scheme which involved the illegal principle of coöption. There was no documentary evidence that they had signed any other letter than that which was printed in the circular, and which ex-

pressly stated this. With regard to the question of the legality of the amalgamation, he asserted that it was altogether illegal. Mr. John Murray's opinion to that effect had been sent round to the Fellows, and, in addition, he now produced an opinion from Mr. William Kenny, Q.C., which emphatically corroborated the statement that the proposed scheme was illegal, and could not be carried out.

A division having been called for, the result was: for the amendment, 34; against, 55; it was therefore lost by a majority of 21.

Mr. Myles moved another amendment: that, having regard to the fact that the control of the Council over their own school had been a failure, the meeting refused to hand over the new school to a system of control which was wholly inefficient.

Mr. Lentaigne supported this, and Sir George Porter pointed out that it was only right that the Council should have control of the school, and objected to the amendment.

The President said that this amendment would reflect on the Council, and, accordingly, it was withdrawn by Mr. Myles.

Mr. Thomson hoped his resolution would satisfy the wishes of those present. To carry on a system of amendments at that time was not wise; the principle of amalgamation having been carried, all interests would be carefully protected.

A division being taken, the resolution was declared to be carried by a considerable majority.

The following bye-laws, adopted by the Council on the previous day, were passed unanimously:—"1. In view of a consolidation of the School of the College with the Carmichael and Ledwich Schools, the Council shall elect the following professors, who, with the existing professors of the College, shall form the professorial staff of the combined schools—viz., one additional Professor of Surgical Anatomy, two additional Professors of Surgery, one additional Professor of Medicine, one of Chemistry, two of Midwifery, one of Materia Medica, one of Medical Jurisprudence, one of Botany and Zoology, two of Ophthalmology, one of Pathology, and one of Pharmacy; and such professors and teachers may be appointed on any such day or days and after such notice as the Council shall determine. 2. As it is intended that eventually there shall be but one professor in each of the following chairs—Medicine, Botany, Chemistry, Materia Medica, Midwifery, Medical Jurisprudence and Ophthalmology—until that occur, vacancies arising in any of these chairs shall not be filled, and one-quarter of the total fees received shall be reserved for each vacancy which shall arise, to be applied by the Council as directed by the scheme for combination. 3. Any vacancies arising in the chair of Surgery shall not be filled so long as the professors thereof shall exceed two, and until there be but two, no deductions shall be made from the receipts on account of the general fund, but after that period one-quarter shall be deducted to be applied by the Council as directed by the scheme."

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Diphtheria at Midsomer Norton.[1]—Dr. Blaxall has reported on one of those obscure occurrences of diphtheria which are becoming more and more common, and in which the infection can be traced back a certain number of stages after which all clue is lost, and in which nothing definite can be ascertained as to the etiology of the disease. On a population of 4420 persons living under fairly ordinary, but by no means satisfactory, sanitary circumstances, twenty-seven families suffered from diphtheria during the spring and early summer; the total attacks being forty and the deaths six. The Chapel school was first associated with the definite disease, but before this was recognised it appears that there was sore throat of a suspicious character; and, indeed, a careful inquiry into the surrounding districts showed that diphtheria, first appearing as an epidemic at Timsbury in the Clutton rural district, spread to different places, amongst which Dunkerton in the Bath rural district may especially be named, until it arrived at Midsomer Norton, where its main spread was associated with attendance at a given school. There seems some indication that a series of throat affections which were locally regarded as being "mumps" &c. formed the connecting links between the several attacks and outbreaks of the well-marked disease, and Dr. Blaxall suggests whether these may not have taken their place in a progressive development from so-called sore throat into true diphtheria. Mere suggestion is too often the only result of carefully conducted inquiries into diphtheria, but it is certain that, apart from exhaustive investigations such as very properly continue to be made, we have little hope of arriving at any such conclusion with regard to the character and source of the diphtheria poison as will suffice for the adoption of measures which may be expected to eradicate an increasingly fatal form of infectious disease from our midst.

[1] Eyre and Spottiswoode, East Harding-street, E.C.; Adam and Charles Black, Edinburgh; and Hodges, Figgis, and Co., Dublin.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5582 births and 3780 deaths were registered during the week ending Oct. 20th. The annual rate of mortality, which had been 18·2 and 21·0 per 1000 in the preceding two weeks, was again last week 21·0. During the first three weeks of the current quarter the death-rate in these towns averaged 20·0 per 1000, and was 0·1 above the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 16·0 in Leicester, 16·1 in Brighton, 16·4 in Bradford, and 16·5 in Hull. The rates in the other towns ranged upwards to 26·7 in Bolton, 28·2 in Plymouth, 29·3 in Sunderland, and 29·8 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 505 and 461 in the preceding two weeks, were last week 465; they included 129 from diarrhœa, 122 from measles, 63 from scarlet fever, 58 from "fever" (principally enteric), 53 from diphtheria, 40 from whooping-cough, and not one from small-pox. No death from any of these zymotic diseases was registered during the week in Halifax; while they caused the highest death-rates in Salford, Blackburn, and Bolton. Diarrhœa showed the greatest mortality in Portsmouth, Preston, and Bolton; measles in Blackburn, Wolverhampton, and Leeds; scarlet fever in Sunderland, Derby, and Blackburn; "fever" in Preston, Salford, Bolton, and Birkenhead; and whooping-cough in Cardiff. The 53 deaths from diphtheria in the twenty-eight towns showed a further increase upon recent weekly numbers, and included 36 in London and 6 in Manchester. Small-pox did not cause a single death in any of the twenty-eight great towns. The Metropolitan Asylum Hospitals and the Highgate Small-pox Hospital contained no patient during the week. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 1003 at the end of the week, and showed a further increase upon numbers which had risen in the preceding eight weeks from 774 to 983; 101 cases were admitted during the week, against 92 and 119 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding seven weeks from 130 to 311, further rose last week to 364, and exceeded the corrected average by 18. The causes of 74, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Sunderland, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Wolverhampton, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 17·0 and 20·4 per 1000 in the preceding two weeks, was again 20·4 in the week ending Oct. 20th; this rate was, however, 0·6 below the mean rate during the same week in the twenty-eight large English towns. The rates in these Scotch towns ranged from 12·6 and 15·8 in Leith and Edinburgh, to 21·3 in Glasgow and 43·8 in Paisley. The 517 deaths in the eight towns showed a

further increase of one upon the numbers in recent weeks, and included 27 which were referred to diarrhœa, 24 to measles, 10 to scarlet fever, 8 to diphtheria, 7 to "fever" (principally enteric), 6 to whooping-cough, and not one to small-pox; in all, 82 deaths resulted from these principal zymotic diseases, against 45 and 60 in the preceding two weeks. These 82 deaths were equal to an annual rate of 3·2 per 1000, which exceeded by 0·6 the mean rate from the same diseases in the twenty-eight English towns; the rate in the eight towns ranged from 0·0 in Leith to 3·4 in Greenock and 21·9 in Paisley. The deaths attributed to diarrhœa, which had been 18 in each of the preceding two weeks, rose last week to 27, of which 10 occurred in Glasgow, 7 in Dundee, 3 in Aberdeen, and 3 in Paisley. The 24 fatal cases of measles showed a further increase of 10 upon the numbers in recent weeks, and included 22 in Paisley, against numbers ranging from 3 to 12 in the preceding five weeks. The deaths from scarlet fever also showed an increase upon recent weekly numbers; 6 occurred in Glasgow and 2 in Greenock. The 8 deaths from diphtheria corresponded with the number in the previous week, and included 3 in Glasgow and 3 in Edinburgh. Of the 7 deaths referred to "fever" 5 occurred in Glasgow, and of the 6 fatal cases of whooping-cough 4 were returned in Glasgow and 2 in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 76 and 100 in the previous two weeks, further rose last week to 106, but were 2 below the number in the corresponding week of last year. The causes of 59, or 11 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 23·3 and 23·6 per 1000 in the preceding three weeks, further rose to 24·2 in the week ending Oct. 20th. During the first three weeks of the current quarter the death-rate in the city averaged 23·7 per 1000, the mean rate during the same period being 18·4 in London and 16·6 in Edinburgh. The 164 deaths in Dublin last week showed a further increase of 4 upon the numbers in the previous two weeks; they included 7 which were referred to "fever" (typhus, enteric, or ill-defined), 7 to diarrhœa, 6 to whooping-cough, 1 to measles, 1 to scarlet fever, 1 to diphtheria, and not one to small-pox. Thus 23 deaths resulted from these principal zymotic diseases, against 37 and 25 in the preceding two weeks; these were equal to an annual rate of 3·4 per 1000, the rate from the same diseases being 2·7 in London and 1·0 in Edinburgh. The deaths referred to "fever," which had been 7 and 3 in the previous two weeks, rose again last week to 7; the fatal cases of diarrhœa, on the other hand, further declined from 19 and 13 in the preceding two weeks to 7. The deaths from whooping-cough were within one of the number in each of the previous two weeks. Four inquest cases and 3 deaths from violence were registered; and 42, or more than a quarter, of the deaths occurred in public institutions. The causes of 18, or 11 per cent., of the deaths in the city were not certified.

ZYMOTIC DISEASE AND INFANTILE MORTALITY IN FRENCH TOWNS.

The official report upon the sanitary condition of the largest French towns in July has just been issued. It appears that in the fifty-one French towns, which at the time of the last census in 1886 had a population exceeding 30,000, and having an aggregate population of rather more than six and a quarter millions, 258 deaths from typhoid fever were reported during the month, against 238 in May and 203 in June; the annual death-rate from this disease in these towns in July was 0·49 per 1000, which was almost three times the rate from the same disease in the much larger and more densely populated twenty-eight English towns. The deaths from small-pox in these French towns, which had declined in the first six months of the year from 261 to 149, were 153 in July, of which 14 occurred in Paris, 14 in Havre, 23 in Montpellier, 20 in Beziers, 15 in Cette, and 22 in Perpignan; the 153 in July were equal to an annual rate of 0·29 per 1000, which was more than seven times the rate from this disease in the largest English towns. Diphtheria was more fatal in the French towns during July than either typhoid fever or small-pox, and caused 278 deaths, showing a slight decline from the number in the previous month; these deaths were equal to an annual rate of 0·53 per 1000, which was more than three times the rate from this disease that prevailed in the English towns. The deaths from diphtheria in the French towns included 110 in Paris, 28 in Marseilles, 25 in Bordeaux, 15 in Grenoble, and 13 in Nice. The deaths attributed to diarrhœa in these fifty-one French towns were 1287, and were equal to an annual rate of 2·46 per 1000, against 0·68 in the English towns; thus diarrhœa mortality was more than three and a half times as great in the French as in the English towns. As summer diarrhœa is mainly an infantile disease, it may be interesting to note the rate of mortality from all causes in the French towns among infants under one year of age, which was during July equal to 169 per 1000 of the births registered during the month; infant mortality in the English towns, measured in the same manner, did not exceed 139 per 1000. The real excess of infant mortality in the French towns is considerably greater than appears from the figures given above, for all infants dying in France previously to registration are recorded as stillborn, and are not counted as deaths. It is probable that in England a certain small proportion of the children who die in the first day of life are, in spite of the legal enactments to the contrary, buried as still-born, and so escape registration; but the deficiency of registration thus caused must be far more than outbalanced, so far as comparison with France is concerned, by the state of the law in that country, which practically permits *all* deaths of infants occurring before registration to be recorded as still-born, and not to be entered in the death register.

Correspondence.

"Audi alteram partem."

THE TEACHING OF ANÆSTHETICS.

To the Editors of THE LANCET.

SIRS,—Allow me to make a few remarks in reference to the correspondence which has been elicited by your admirable article on the use of anæsthetics (THE LANCET, Sept. 15th). Unlike some of your correspondents, I am in the happy position of holding views which agree in every particular with those which were so ably advanced in the article in question, and I feel sure that most, if not all, of those who instruct in the administration of anæsthetics will rejoice with me at the appearance of so many substantial arguments against the use of chloroform for general purposes.

Let me ask those who quote statistics of deaths under anæsthetics to consider the value of conclusions based upon such numerical statements. There is, I venture to think, abundant proof that, under the present inadequate system of recording observations, all such statistics are not only worthless but misleading. Let us picture a recently qualified student who, in his reading, meets with the soothing and familiar statement that "Professor X. has employed chloroform so-many-thousand times without a single death." In the first place, the reader of this barren record does not, in all probability, take into account the professor's skill, and the experience which he (Professor X.) obtained prior to the commencement of his so-many-thousand cases. In the second place, no mention is made of the number of times the professor had to perform artificial respiration and to adopt other restorative measures to rescue his patients from the clutches of impending death. The professor may, from constant practice, have become remarkably nimble in the treatment of emergencies; but of this we are not informed. In the third place, the unsuspecting reader may not be aware of the facilities which exist for imputing fatalities to causes other than the anæsthetics employed. In the fourth place, no information is given respecting the methods practised by the professor in the administration of the chloroform. Lastly, it should be borne in mind that there is always the possibility of Professor X. having judiciously selected his cases. For these and other reasons which will suggest themselves to anyone who reflects for a few moments, I am inclined to the belief that statistics of death—whether from ether or chloroform—become worthless as they are at present compiled. I will next attempt to show the pernicious effects which are produced by such statistics, more especially when they refer to choloroform. It is, I think, clear that they chiefly appeal to and influence the inexpe-

rienced practitioner, who, having administered anæsthetics at his hospital to a very limited extent, goes into practice with the fullest confidence in the safety of a drug which, as he probably informs his friends who have not read the article from which he has obtained his information, has been administered by Professor X. "so-many-thousand times without a single death."

I trust I may not be proceeding beyond the limits of the present discussion if I mention a point which seems to me to deserve particular notice in connexion with deaths under chloroform. I allude to the frequency with which healthy individuals have succumbed to the administration of this anæsthetic. What is the explanation of this fact? Some writers have advanced the view that robust and healthy persons are more susceptible to the influence of chloroform than those whose constitutions have been more or less undermined by disease. But surely this view is opposed to what we know of the action of most poisonous drugs; and, so far as my own experience in the matter goes, I should certainly say that, *cæteris paribus*, the weaker the individual the more readily does he yield to the anæsthetic influence of chloroform. I am inclined to believe that there are two main reasons why those in the enjoyment of fair or good health are especially liable to become the victims of chloroform poisoning. 1. The absence of serious organic disease is likely to engender a certain degree of carelessness in the administrator—carelessness which, if the patient were the subject of any constitutional affection such as phthisis or morbus cordis, would probably be replaced by watchfulness and caution. The high pressure at which we have to work at the present day is frequently responsible for the want of caution to which I have alluded. Patients in good general health do not, as a rule, suffer from any condition demanding prolonged anæsthesia; so that when a minor operation on a healthy individual is about to be performed, there is a tendency to look upon the whole matter as a trivial one. It frequently happens that either a light and transient anæsthesia is induced, or that the patient is overdosed with the anæsthetic. Although I believe that the dangers incidental to a light narcosis have been over-estimated, I freely admit that it is difficult to explain many of the deaths which have occurred by any other hypothesis. With ether, a light form of anæsthesia is, of course, far less likely to be productive of dangerous symptoms than with chloroform. 2. The other reason why persons in good health are more likely to be placed in serious danger than others is that struggling and excitement are far more common in such persons than in the weakly, anæmic, and debilitated. The muscular navvy, more especially if he has been addicted to alcohol, will, as a rule, struggle violently during the process of chloroformisation. The administrator, who is anxious not to cause greater delay than is necessary, proceeds to push the anæsthetic, and during the deep respirations which accompany or immediately follow the struggling a considerable quantity of chloroform is inhaled in a few seconds, and dangerous symptoms ensue. Had the patient been, for example, an anæmic child, the subject of old-standing hip disease and incipient phthisis, greater care would have been taken, the period of excitement would, as is usual in such cases, have been feebly marked, and so the risk of an overdose would have been very greatly reduced.

I would next draw the attention of your correspondents who hold that chloroform is the most suitable anæsthetic for general purposes to the following considerations. Let us imagine that we have before us what may be termed an average patient; let us suppose that he is about to undergo an operation of average length and importance; and, lastly, let us arrange that he shall be anæsthetised by a practitioner possessing but a rudimentary knowledge of the use of anæsthetics. Now what I would most strongly insist upon is this: that it would be comparatively easy to kill such a patient by the injudicious administration of chloroform, but a matter of considerable difficulty to do so by the injudicious administration of ether. This is surely a most important point. In recommending an anæsthetic for general use we must consider the inexperienced rather than the experienced. I do not propose to take part in any discussion on the relative merits of ether and chloroform; all I do is to submit the foregoing hypothetical, but nevertheless common, case to the consideration of your correspondents, and to state that, with the knowledge we at present possess, I should consider it highly prejudicial to the interests of the public to recommend chloroform as an anæsthetic for general purposes.

In conclusion, I would express the gratification which I feel when I recognise that the practice of employing one anæsthetic for all cases is gradually becoming obsolete. I can only compare the practitioner who uses ether, chloroform, or any particular anæsthetic, exclusively, to the physician who is in the habit of prescribing an opiate for the relief of cough, whatever the latter may depend upon. I would submit that there may be as much tact and forethought necessary in deciding upon the most appropriate anæsthetic as in solving other problems in therapeutics; and it is for this reason, amongst others, that systematic teaching in the selection and administration of anæsthetics should form a part of the recognised curriculum in every medical school.

I am, Sirs, your obedient servant,

FREDERIC HEWITT,
Instructor in, and Lecturer on, Anæsthetics at the London Hospital, &c.

George-street, Hanover-square, Oct. 23rd, 1888.

To the Editors of THE LANCET.

SIRS,—My main object in writing the letter which you were kind enough to insert in your issue of the 13th inst. was to insist upon the importance of the science of anæsthetics as a distinct branch of medical education. In this respect I am pleased to find that my opinions are completely in accord with those of Mr. Foy. Such being the case, the questions as to whether or not I have misunderstood the general sense of Mr. Foy's letter of the 22nd ult., or whether I have overstated the facts with regard to the use of ether in America, must be left to your readers, who have no doubt already drawn their own conclusions. I should, however, like to make one slight correction in my letter of the 13th. By a printer's error I am represented as saying that I did not admit "either the advisability or practice of such a proceeding"—i.e., legislative interference with the administration of anæsthetics. What I really wrote was somewhat stronger—viz., "I do not admit either the advisability or *justice* of such a proceeding"; and I again find myself in agreement with Mr. Foy, in deprecating, and deprecating most strongly, what he very justly terms "hysterical legislation" in the matter. My own position, and I believe that of many other anæsthetists, with regard to the use of chloroform, is as follows:—1. I fully admit that chloroform is a most valuable anæsthetic, and in certain cases the only one admissible. Here, again, I am at one with Mr. Foy; but I maintain that the number of such cases is much over-estimated, and, *per contra*, that the use of ether is in the majority of instances distinctly called for. 2. The comparative ease with which a patient can be deeply anæsthetised by the use of chloroform, so far from telling in its favour, I look upon as a distinct disadvantage, inasmuch as it tends to careless administration, and to emphasise the convenience of the surgeon at the expense of the safety of the patient. 3. When it is desirable to do so, the unpleasant taste of ether, and many of the objectionable after-effects, can be obviated by the use of nitrous oxide as an introduction to the free administration of ether. But both this "combined method" and the administration of ether by itself require special forms of apparatus, and more or less skill in their use. As far as ether itself is concerned, perfectly satisfactory inhalers, at once portable, simple, and inexpensive, are available; the necessary skill and experience should be obtainable in our schools. Unfortunately, this is not always the case, and I am firmly persuaded that until systematic instruction in anæsthetics becomes more general, so long will the indiscriminate use of chloroform prevail, and the death-rate from anæsthetics remain abnormally high. On the other hand, with the recognition of "instruction in anæsthetics" as an integral portion of the medical curriculum, we shall find the use of ether becoming more universal, and the death-rate correspondingly diminishing.

I am, Sirs, yours truly,

Pemberton-road, N., Oct. 1888. J. FREDK. W. SILK.

QUIETENING MEDICINES.

To the Editors of THE LANCET.

SIRS,—It is a pity that Dr. Savage, in laying the ghost which has been stirred up anent restraint, should raise another. This he certainly does when he makes the very pointed remark, "No patients are ever kept quiet by means of drugs."

I know what Dr. Savage's views are on the harmfulness of those terrible "quieteners," chloral and hyoscyamine, and I thoroughly agree with him that if anything is likely to destroy a patient's chance of recovery it is the reckless use of such remedies. Since a lunatic suffering from insomnia dropped dead at my feet, after taking his evening dose of chloral, some seventeen or eighteen years ago, I have never prescribed that awful life-destroyer! I never prescribed a dose of hyoscyamine in my life, for I had the advantage of Dr. Savage's experience and opinion, as set forth in the *Journal of Mental Science*, before I thought of using it. At the same time I must look at such remedies in the light of the "governor" of a steam engine, which does not assist or retard, but regulates progress. It is the experience of all that the most harmful of drugs have their proper use; and in some hands opium itself is a very harmful drug, but we know how it is regarded as the "sheet anchor" of the physician in inflammatory disease; and so I find is *hyoscine*, which is as constant a preparation as morphine, useful in many cases. In excitement it will allay that symptom, and in profound melancholia it will certainly excite hilarity.

But if Dr. Savage has not used "quietening medicines" at Bethlem Hospital, what has he used? The following is a comparative table of one year's cost of medicine in Bethlem and St. Luke's Hospitals respectively, compiled from the Lunacy Blue Book in 1887:—

Name of asylum.	Average No. of patients resident.	Cost of medicine.	Cost per head per annum.
Bethlem	264	£270 0s. 6d.	£1 5s. 0d.
St. Luke's	193	73 8s. 6d.	0 7s. 7d.

Surely this shows economy practised in one asylum, in which, besides the usual staff, there are two visiting physicians; and almost recklessness in another, which is not blessed with officers, who ought not to be purely ornamental! I find in practice here that the more painters I employ the more paint is used. Ought it not to be so in the matter of physicians and physic?

Yours faithfully,

Stapleton Asylum, Oct. 13th, 1888. GEO. THOMPSON, M.D.

THE MONOPOLY OF HOSPITAL APPOINTMENTS.

To the Editors of THE LANCET.

SIRS,—Two correspondents have already called attention to the above eminently unsatisfactory condition of affairs. Theoretically at least, hospitals exist for two purposes—the treatment of the sick poor and the education of the medical profession. In the opinion of many, doctors connected with a hospital are supposed to possess more skill and knowledge than those who are not. No doubt the *élite* of the profession hold hospital appointments. But as it is the opportunities and surroundings which make the individual, so it is considered that the performing of hospital duties elevates and improves the medical tone of a doctor. Holding that the hospitals are for the benefit of medical men, and for the improvement of their finances, I venture to suggest that the field of work in them should be greatly extended. Some time ago I called attention to the above in connexion with the Liverpool hospitals. It will scarcely be believed that there are only ninety-four visiting doctors connected with our eighteen chief hospitals, and, further, that many of these are connected with one, two, and in some cases three, different hospitals. (Dual appointments should be done away with.) There are also twenty-four resident doctors, and twenty-two dental surgeons. The consultants number thirty-nine, but in many cases these are acting surgeons to other hospitals. In 1885 there were 11,376 in-patients and 244,831 out-patients treated. Liverpool has a population of about 600,000, and 425 medical men. By subtracting the number of hospital patients, *plus* the number treated by the Poor-law, from the population, we get an average of 600 persons to each medical man. It is a low average, and therefore the men have enough time to spare for other work.

I have lately, in connexion with my prize essay, "The Financial Condition of the London Hospitals," collected statistics from 130 of the London hospitals. I find from the 1886 reports that during the previous year 50,935 in-patients and 1,179,661 out-patients were treated. To do all this work there were 742 visiting and 138 resident doctors. There were 287 consultants and 183 dentists. These figures speak for themselves. To me it has always seemed to be a mockery when a physician or surgeon walks through four or five large wards. Two would be quite sufficient for his ability to find ample scope, while the others should be given to another man. As long as this monopoly, with its rigid exclusiveness, goes on, so long will it be found that medical men will establish private hospitals for themselves, as is now done in America and Germany, and will endeavour to withdraw subscriptions now given to other hospitals to their own institution. And who can blame them? A "hospital ring" is as unpleasant a body to deal with as can be found. It degenerates into a system of trickery whereby their friends and relatives are hoisted into appointments, while it excludes the hopeful and well-educated men from attaining their due eminence. As long as the being on a hospital staff is the royal road to a good-class practice, so long should this path be open to all anxious for advancement. In my opinion every respectable and highly qualified medical man in a town or city should serve from five to eight years on a hospital staff. In this way the "higher education" would be open to all; the medical profession would, as a whole, be elevated, and the non-medical public would be greatly benefited. At the same time, all those little vexatious restrictions as regards the attainment of the higher degrees in medicine and surgery should be withdrawn. If our journals have not the power or will—for most of our medical papers are managed by hospital men—to bring about the necessary reform, then I would strongly recommend that medical men take every opportunity to educate those of their patients who subscribe to hospitals, by letters to the daily papers, and by conversation regarding the present unsatisfactory state of affairs; for the medical man who thinks he is going to make any influence on the "hospital ring," and induce them to widen this circle, is a fool, and deserves to be excluded.

N.B.—It should be noted that there are 4852 medical practitioners in the metropolis.

I am, Sirs, yours truly,

Liverpool, Oct. 15th, 1888. ROBERT R. RENTOUL, M.D.

REFORM AT THE COLLEGE OF SURGEONS.

To the Editors of THE LANCET.

SIRS,—May we through your columns remind Members of the Royal College of Surgeons of England that the annual meeting of the Members and Fellows of the College will be held in Lincoln's-inn-fields on Thursday next, the 1st prox., at 3 P.M. Though the College Council has gained the point of obtaining a Supplemental Charter, in order to empower it to hold land &c. of greater annual value than hitherto, still the Privy Council most markedly alluded to the fact that it was avoiding the disputed point. We may therefore hope that at no far distant date a further Charter may be obtained from the Crown granting the equitable and moderate demands of the Members. Let Members therefore assemble on Thursday in numbers as large as on former occasions, and assist us in passing resolutions emphasising the determination of the great body of the corporation to make its voice heard in the management of the affairs of its own College.—We are, Sirs, your obedient servants,

WARWICK C. STEELE, } Hon. Secs. Assoc.
Oct. 25th, 1888. WM. ASHTON ELLIS, } M.R.C.S.

"TREATMENT OF PUERPERAL SEPTICÆMIA."

To the Editors of THE LANCET.

SIRS,—In answer to Dr. Tayler's courteous criticism of part of my paper in THE LANCET of Oct. 13th, I may say that my experience has led me to the conclusion that the value of the vaginal douche with solution of permanganate of potash in puerperal septicæmia is in many cases very far from an "utter waste of time." In fact, in all those cases where the source of infection is situated in the vagina—the source of infection is not always in the uterine cavity—I have frequently had the very best results by merely washing out the vagina with Condy's fluid reduced with warm water. The obvious objection in these cases to making a vaginal examination with the finger renders it, I think, desirable, in the first place, always to make a tentative experiment upon the vagina. My reason for not carrying out the "uterine toilet" as described in my paper before the 20th was because until

that date I did not despair of my patient's recovery under the treatment then adopted. To carry out the treatment described on the 20th it was absolutely necessary to use the uterine hook, in the first place, to bring the uterus within convenient distance; and, in the second place, to fix it. I would submit that describing the prick of the hook as "inflicting a wound" is a somewhat unusual way of putting it. Nor do I think that a wound, when the patient is already in a profoundly septicæmic condition, would in any way aggravate that condition.

I claim that in swabbing over the cavity of the uterus with a pledget of cotton wool saturated with an antiseptic caustic, such as iodised phenol, there is a great advantage to the patient over merely washing out the uterus with an antiseptic fluid by means of a syringe. In the first place, because I found the internal surface of the uterus in this case lined with a thick, exceedingly tenacious, sanguinolent mucus, which could only be removed by a tolerably energetic application of the pledget, and would, I am sure, have been left entirely untouched by a stream of solution of permanganate of potash ejected by any ordinary syringe; in the second place, iodised phenol possesses caustic properties, and by cauterising the endometrium its antiseptic influence would somewhat affect the septic uterine tissue, and the cauterised tissue would form a barrier against further infection.—I am, Sirs, yours faithfully,

Newcastle-on-Tyne, Oct. 23rd, 1888. S. MCBEAN.

THE CONTAGIOUS DISEASES ACTS.

To the Editors of THE LANCET.

SIRS,—My letter on the Contagious Diseases Acts seems to have failed in explaining clearly my views regarding them. I may think that those Acts are urgently needed, that they are perfectly justifiable, and that they would be very effective; but it seems mere waste of time to discuss them, since any proposal for their restitution is utterly impracticable, and ten members of Parliament cannot be found to advocate them openly, whatever they may say in private. The course I advocate includes education of the public as to the effects of syphilis; compulsory notification of infectious diseases; punishment of anyone who infects another with small-pox; compulsory examination and seclusion of small-pox cases; punishment of the exposure of an infected person in any way likely to inflict grievous bodily harm on another; classification of syphilis with the most malignant form of small-pox. There is no need to concentrate attention on venereal diseases, or to treat them as some peculiar and mysterious ailments which have no relations to other diseases.

I am, Sirs, yours very truly,

Oct. 22nd, 1888. A MEDICAL MUSER.

BIRMINGHAM.

(*From our own Correspondent.*)

MEDICAL MISSION.

THE annual meeting of the friends and subscribers of the Birmingham Medical Mission was held on the 18th inst. The report showed that there was an adverse balance of £70 odd. During the past year, 3877 cases had been treated at the mission, and, including those treated at their homes, 18,111 consultations had been given, an indication of the activity with which the work had been carrred on. A savings bank and a temperance society had also contributed to the good influences effected by the mission; and though the cause had been hampered by want of funds, it was considered to be a matter of congratulation that so much had been done with the means at command. A vote of thanks was given to the Medical Superintendent, Dr. Crabbe, for the zeal and energy with which for so many years past he had conducted the work of the mission.

QUEEN'S COLLEGE.

The twenty-second annual meeting of the governors of Queen's College was held on the 18th inst. The report showed that the College was in a prosperous condition, and that last year had witnessed the largest number of entries on the record. Of 193 students in attendance during the year, 135 had passed one or more examinations by the different examining bodies. Valuable additions had been made to the museum, which had been rearranged and increased, while various structural changes had been effected in the building. Good order and discipline had been maintained, and there was every reason to look forward hopefully and with confidence to the future.

NEW EYE INFIRMARY AT WOLVERHAMPTON.

A new building for the treatment of eye cases was opened by the Earl of Dartmouth on the 23rd inst. Erected by the liberality of Mr. Philip Horsman, the new infirmary consists of a main block for in-patients and a wing for out-patients with separate approaches. The sanitary and ventilating arrangements have been carefully superintended, and the building is heated with hot-water apparatus. Admirably planned, the execution of the work has left nothing to be desired, and it is to be hoped that the attendance of patients will justify the completeness of the work.

BOILER EXPLOSIONS.

Accidents of this kind are in the present day fortunately rare, yet, though considered to be preventable, they occasionally happen, in spite of the greatest care exercised in inspection and management. A lamentable instance lately occurred at a large flour mill in the town, where four lives were lost. The boiler was laid down in 1876. It was found that it had been regularly cleaned and repaired, as well as officially inspected from time to time, yet suddenly, without warning, it exploded and scattered havoc and death around. There were no signs of wear in it, no evidence of its having been overheated, and the flues were intact; but it was found that where it had been bound with iron rings there were some defective seams beneath. These had escaped observation in the inspection from the fact of being covered, and yet had come to give way at last. It was stated in evidence that in the present time more care is given to the joinings where rivets enter, and that such accidents are much less likely to happen than in former years. A fact which may convey comfort where new boilers are placed does not afford much consolation in cases where they have been in use for any length of time, even under careful supervision.

Birmingham, Oct. 24th.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NEWCASTLE-ON-TYNE.

IT is announced that the Princess Louise is to visit our city on Nov. 5th, her Royal Highness having consented to open the College of Physical Science here. Many people at a distance confound this new building with the new Medical College, but they are quite distinct buildings. The College of Physical Science is also in connexion with the University of Durham, and at one time it appeared likely that it might combine with the Medical College and so have one magnificent building; some obstacles, however, arose, and the scheme was abandoned. So we have two buildings where one might have looked and done better; but, as it is, these two buildings are very complete of their kind, and will enrich the architectural features of our city.—I regret to say that the Local Government Board have declined to sanction the retiring allowance made by the guardians, and carried by a large majority, as a superannuation to their late workhouse surgeon, Mr. N. Hardcastle, who served the union faithfully for the long period of thirty-five years. The objections of the Local Government Board are, at all events, hardly logical—namely, that as Mr. Hardcastle still holds the office of prison surgeon in this city he cannot be considered incapable of fulfilling his ordinary duties. Now, a man might be able to do one-half of his work very well, and yet find the whole too much, as I believe is the case with Mr. Hardcastle. The guardians have, however, determined to bring the case again before the Board, and it is to be hoped with success the next time.

MIDDLESBROUGH.

I regret to mention the death of Dr. T. Craster, the oldest practitioner in Middlesbrough, which took place on Tuesday, Oct. 16th. Dr. Craster, who was in his fifty-ninth year, had been in declining health for some time, but on the day preceding his death alarming symptoms set in, and he was visited by Dr. Embleton, from Newcastle, who

saw him in conjunction with his friend Mr. Longbotham, but he sank rapidly and died during the night from pneumonia. Dr. Craster belonged to an old Northumbrian family, and was intimately connected with Newcastle. At one time he was a lecturer in the school here, but about thirty-two years ago he removed to Middlesbrough, where he was very successful, seeing a good deal of the rise of that remarkable town. Dr. Craster has left a widow and six children.

MUNIFICENT GIFT OF A HOSPITAL.

A meeting of the members of the various public bodies, clergy, &c., was held in Langholm Town Hall on Oct. 16th to present an illuminated address to Mr. Thomas Hope, a citizen of New York but a native of the town, who had resolved to build a hospital for the relief and cure of persons, natives or residents of the town or neighbourhood, to be named the Thomas Hope Hospital. It was further stated that Mr. Hope had already purchased a site for the building, at a cost of £1500, and made it over to trustees.

HARROGATE BATH HOSPITAL.

It is announced that Miss Rawson, of Nydd Hall, Yorkshire, has just given her second subscription of £5500 towards the cost of the Rawson Convalescent Home in connexion with the Harrogate Bath Hospital.

Newcastle-on-Tyne, Oct. 23rd.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH WATER SUPPLY.

THE water supply of the city, to which I referred a short time ago, is a capital text on which to base a municipal address, a fact of which several of the candidates for civic honours have availed themselves to the full. There can be no doubt that the matter will be thoroughly threshed out, but what the ultimate result of the discussion will be it is at present impossible to foretell. There is already a feeling that, if waste were prevented, the supply would in all probability be sufficient for some years to come. This is undoubtedly the case; but the position must be faced that some time, and that ere long, there will have to be a very material increase in the water-storage accommodation. It would therefore be politic for the Water Trust, whilst using all the means at their disposal for the prevention of waste, to make every inquiry as to possible future sources of supply, and to take such preliminary steps as may be necessary to prevent a too hurried construction of waterworks, should a series of dry summers reduce the water supply below what is required by a growing city like Edinburgh.

EDINBURGH UNIVERSITY COURT.

Amongst other business at the University Court, it was reported "that an Order of Her Majesty in Council has been received approving of the alteration of Section 5 of Ordinance No. 5 (Edinburgh, No. 2), under which an increased amount of practical instruction in midwifery will be required of candidates for graduation in medicine." It was also agreed to apply for an alteration of the Edinburgh University Financial Ordinance, to enable the University authorities to make a grant of £500 from the General University Fund towards the cost of the Students' Union.

At the same meeting the following gentlemen were recognised by the University as teachers of medicine, in addition to those mentioned last week: Mr. A. G. Miller, F.R.C.S.E., Lecturer on Clinical Surgery, Edinburgh; Mr. Patrick Geddes, Lecturer on Botany, Dundee; and Mr. J. Rymer Paterson, B.Sc., Teacher of Practical Chemistry, Edinburgh.

STUDENTS' UNION.

With reference to the above minute anent a grant to the Union, it may be mentioned that the Acting and Buildings Committee, on which are acting many of those in high authority, have already authorised an expenditure of £14,000—viz., for the site near the University New Buildings, £2000; endowment set aside in the hands of trustees, £1000; building and portion of fittings &c., £11,000. They have at present some £70 in hand with which to meet an estimated expenditure of £3000 for baths, gymnasium, furniture and fittings, &c. The building is now practically finished, and, were funds forthcoming, the very handsome Union, with its large hall, dining and committee rooms, gymnasium and numerous recreation rooms, might be thrown open to the students early in the coming year. There can be little doubt that the Acting Committee have done their share of the work well as far as they are able, and it remains for the students and their friends to come, and that quickly, with the money still required to complete the Union in the style worthy of the portion already finished.

THE TRIPLE QUALIFICATION.

There is evidently a weeding-out process going on at the examinations for the triple qualification of the Royal College of Physicians and Surgeons, Edinburgh, and Faculty of Physicians and Surgeons, Glasgow. The results of the quarterly examinations have just been published, from which we learn that at the first examination there were sixty-five candidates, with nearly 47 per cent. of rejections. For the second examination seventy-seven candidates appeared, over 47 per cent. failing to satisfy the examiners; whilst of eighty-four candidates at the third examination the percentage of rejections was only 24. For the licence in Dental Surgery of the Royal College of Surgeons, seven gentlemen passed the first professional examination and three the final.

BEQUESTS TO EDINBURGH MEDICAL INSTITUTIONS.

Several of the medical institutions in Edinburgh have, under the trust settlement of Mrs. Janet Simpson, of that city, received considerable bequests: the Royal Infirmary, £500; the Royal Hospital for Sick Children, £200; the Hospital for Incurables, £200; and the Convalescent Home connected with the Royal Infirmary, £200. In addition to these, several smaller bequests are mentioned. All the legacies are payable free of duty, and the residue of the estate is to be handed over to the Royal Infirmary.

Edinburgh, Oct. 23rd.

DUBLIN.

(From our own Correspondent.)

COLLEGE OF PHYSICIANS.

THE annual meeting was held as usual on St. Luke's Day, the 18th inst., for the purpose of electing candidates for the Fellowship and office-bearers for the ensuing year. As mentioned by me last week, Dr. Lombe Atthill was duly elected President of the College, and Dr. Foot was selected as Vice-President. Almost all the outgoing examiners were re-elected, and, as usual, Dr. Aquilla Smith was elected a representative of the College on the General Medical Council. Two gentlemen were admitted to the Fellowship—viz., Messrs. Henry Bewley and John Molony.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

The annual meeting of the Academy takes place on Friday, the 26th inst., for the purpose of electing a president and other office bearers, and to make such alterations in the rules of which notices of motion have been given. The General Council in their report state that the number of Fellows has increased to 223, as compared with 211; and that the student associates have fallen to two, as contrasted with thirteen the previous session. The subscription for these latter is only 5*s.* a year, and it is a subject of regret that more third-year students, who alone are eligible, do not take advantage of joining the Academy in larger numbers. The Council suggest as the advisability of the Academy inviting each year a distinguished member of the profession to give an address on some branch of medicine, and that a sum of twenty-five guineas should be allocated for this purpose. Considerable interest is felt in the contest for the presidency between Drs. Gordon and Kidd.

PROPOSED AMALGAMATION OF THE DUBLIN MEDICAL SCHOOLS.

As a reply to certain statements made in a circular issued by those professors of the College who dissent from the proposed amalgamation between the College and the Carmichael and Ledwich Schools, a circular has been recently issued

to the Fellows by eight gentlemen, seven of whom are members of the Council of the College. They state that the scheme now before the Fellows was adopted at a meeting of the Council, at which the dissentients only numbered two; that it was approved of by the Carmichael and Ledwich Schools; and that of the thirteen professors of the College, seven, or a majority of one only, have protested against it. The question of coöpting the professors from the Carmichael and Ledwich Schools, so strongly objected to by the dissentient professors, was, they remark, openly and clearly abandoned after discussion at the Council before the publication of their circular. Further, they show that the dissentient professors, under the proposed scheme, instead of being damaged in a pecuniary sense, will, on the contrary, gain an increase of £350 on their average income for the past five years, and will be free of registrars' fees, cost of prizes, and, in the case of the surgery chair, freedom from cost of subjects.—The meeting of the Fellows of the College to consider the scheme on Tuesday, the 23rd inst., was a very important one, and the details will be found in another column. I may state, however, that although some personalities were used, the arguments for and against the scheme were temperately put, and the proceedings were conducted generally with good temper and with an evident desire that all parties should have an opportunity of stating their views. Mr. Thomson's resolution, to the effect that the scheme be approved of, subject to such alterations as might be required to bring it into accord with the Charter and bye-laws, and a satisfactory title shown by the proprietors of the Carmichael and Ledwich Schools, was adopted by a considerable majority.

ROYAL UNIVERSITY OF IRELAND.

A meeting of Convocation will take place next week. Among the matters for discussion will be, it is believed, the present method of electing the Fellows; and a suggestion will be made to utilise the Pathological Museum for medical students generally.

Dublin Hospital Sunday will be held on Nov. 11th.

Dublin, Oct. 23rd.

PARIS.

(From our own Correspondent.)

RESEARCHES ON ALCOHOL.

CONTINUING his researches on alcohol, as reported in THE LANCET of the 13th inst., Dr. Laborde performed some experiments on animals with it, employing three different procedures to introduce it into the system—viz., by intravenous injections, subcutaneous injections, and ingestion by the stomach. These three procedures gave results absolutely comparable, but it is to the first that he gives the preference, because not only are the effects more rapid, but it is the most certain for the study of the toxic properties of a substance. Dr. Dujardin-Beaumetz condemned the method of intravenous injections, as he accuses them of modifying the results by the destructive action which the medicaments injected might exercise on the blood itself. Professor Bouchard defends this method, but only from an experimental point of view. It is the only means by which one can establish the exact dose sufficient for a toxic substance to cause death. Every other mode of introduction of a poison in the organism leaves the experimenter in a state of uncertainty. By the stomach one does not know what is absorbed or what is eliminated, or what is arrested in the liver, or destroyed before it reaches the blood. By hypodermic injection one can better estimate the amount absorbed, but that which acts is still unknown. On the contrary, the direct introduction into the blood permits one to establish with exactitude, for every toxic substance, the precise dose which is necessary to kill a living being of a given weight. It is useful for a medical man to know that it requires to have in the blood forty times more of a salt of soda than of a salt of potash to cause death. These precise notions can only be furnished by intravenous injections. Hence M. Bouchard advocates these injections for experimental physiological study. As regards their employment in therapeutics, he thinks that the time has not yet arrived to recommend them. He sees, however, but one exception to this, and that is watery injections into the veins in cases of dehydration of the blood, particularly in cholera, as practised by M. Hayem.

ELIMINATION OF SOLUBLE VACCINAL MATTER.

At a recent meeting of the Academy of Sciences, Professor Bouchard communicated, in the name of MM. Charrin and Armand Ruffer, a work on the elimination with the urine of soluble vaccinal substances. The authors show that the soluble substances manufactured by the microbes can traverse the body of the animal and be eliminated with the urine, whilst still preserving their property of conferring immunity. The production of vaccinal matter should be attributed directly to the microbes, and not to the cells of the living organism.

VALUE OF TURPENTINE AS A PROPHYLACTIC AGAINST PHOSPHORUS-NECROSIS.

At the meeting of the Council of Public Hygiene of the Department of the Seine, a Commission was appointed to ascertain the value of vapour of essence of turpentine as a prophylactic against the necrosis caused by phosphorus in workmen employed in the manufactories of lucifer matches.

M. PASTEUR AND BACTERIOLOGY.

M. Pasteur, who has returned to Paris from a convalescent trip, has resumed his seat at the Academy of Sciences, and at its meeting of last week presented a work of Professor Macé, of Nancy, on "Bacteriology." In doing this, M. Pasteur objected to the term bacteriology as being defective, since it lacks generality. He prefers the words microbiology, microbian, and microbes, to those of bacteriology, bacterian, and bacilli, as the word microbiology may be applied to all sorts of micro-organisms. Bacteriology constitutes only an isolated chapter of microbiology. This view, according to M. Pasteur, is very accurate, for there are bacteria only among infinitely small beings; there are also bacilli, vibrios, &c. Bacteriology is therefore an improper expression.

The Prince of Wales, accompanied by his aides-de-camp, paid a visit to Pasteur's Institute. He was received by the illustrious *savant*, who furnished the Prince with long and interesting explanations about his antirabic inoculations. A Paris paper, in noticing this fact, made the remark that within a few hours afterwards M. Pasteur (as would a prince, for he may be looked upon as a prince of science) returned the visit of the Prince of Wales.

Paris, October 23rd.

THE SERVICES.

ARMY MEDICAL STAFF. — Deputy Surgeon-General Randolph Webb is granted retired pay (dated Oct. 24th, 1888).

ARMY MEDICAL RESERVE OF OFFICERS.—Surgeon and Honorary Surgeon-Major Wm. Warman Coleman, 3rd Kent (Royal Arsenal) Artillery Volunteer Corps, to be Surgeon-Major, ranking as Lieutenant-Colonel (dated Oct. 24th, 1888); and Acting Surgeon Thos. Finlayson Dewar, M.B., 1st Volunteer (Devonshire) Brigade, Western Division, Royal Artillery, to be Surgeon, ranking as Captain (dated Oct. 24th, 1888).

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon Thomas George Wilson has been placed on the Retired List at his own request, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets.

VOLUNTEER CORPS.—*Royal Engineers:* The Severn Division: Alfred Rees, Gent., to be Acting Surgeon (dated Oct. 24th, 1888).—*Rifle:* 2nd Volunteer Battalion, the Essex Regiment: Honorary Assistant Surgeon H. Laver resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement (dated Oct. 24th, 1888).—2nd (Angus) Volunteer Battalion, the Black Watch (Royal Highlanders): Surgeon and Honorary Surgeon-Major J. Traill resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement (dated Oct. 24th, 1888).—2nd Volunteer Battalion, the Worcestershire Regiment: Acting Surgeon J. B. Grewcock retires on account of ill-health (dated Oct. 24th, 1888).

ROYAL COLLEGE OF PHYSICIANS.

THE ordinary comitia of the College took place on the 25th inst., Sir Andrew Clark, Bart., President, in the chair.

Sir Hugh R. Beevor, Bart., M.B., Surgeon-General C. Planck, Dr. Ernest S. Reynolds, Dr. W. H. Spencer, Dr. T. S. Wilson, and Dr. T. O. Wood were admitted to the Membership.

The President nominated Sir A. Garrod and Dr. Munk to be Vice-Presidents of the College, and Dr. Jas. Pollock to be Harveian Orator for 1889.

A communication was received from the Colonial Office, informing the College that an Intercolonial Medical Congress would be held in Australia from Jan. 7th to 12th, 1889.

Another communication (through Her Majesty's Consul at Havana) referred to an invitation to English physicians from the medical faculty in Cuba to study yellow fever, the faculty offering any such physician the use of their laboratory as well as free board and lodging. It was resolved to ask Her Majesty's Government to appoint a physician to undertake such an investigation.

The audited accounts for the year and the quarterly report of the Finance Committee and balance sheet were presented and approved.

A report from the Council was read upon some Recommendations of the General Medical Council with regard to Professional Education and Examination. The Council reported that the scheme of education and examination now carried out by the two Colleges was in harmony with the proposals of the Medical Council. The reports of the inspectors of examinations were acknowledged with thanks.

On the recommendation of the Committee of Management the following regulation (to take effect from the 1st May next) in the Second Examination was adopted:—"A candidate is required to present himself for examination in Anatomy and Physiology together until he has reached the required standard to pass in one or other of those subjects; but no candidate will be allowed to pass in one of the subjects without obtaining at the same time at least half the number of marks required to pass in the other subject."

Drs. Stevenson, Ballard, Thorne Thorne, and Corfield were re-elected Examiners for the Diploma of Public Health, and Dr. Norman Moore was re-elected a member of the Committee of Management of the Examining Board in England.

On the motion of the Registrar, it was resolved to admit Walter Balls Headley, M.B. Camb., being resident in Australia, to the Fellowship *in absentiâ*, any bye-law to the contrary notwithstanding.

UNVEILING THE BUST OF THE LATE DR. WILSON FOX.

ON Thursday evening, the 25th inst., in Taunton Shire Hall, the Hon. W. H. Portman unveiled the bust of the late Dr. Wilson Fox, Physician-in-Ordinary to the Queen, who died on May 3rd, 1887. The bust bore a suitable inscription, and stated that Dr. Fox's talents commanded the admiration and his character won the esteem of all who knew him. It was pronounced an excellent likeness. Drs. Beddows (Clifton) and Winterbotham (Bridgwater), and Messrs. Alford, Edward Liddon, and Farrant, of Taunton, spoke of the eminent character of the deceased. Mr. R. A. Kinglake, chairman of the county bench, has been instrumental in promoting the movement.

JUBILEE MEMORIAL HOSPITAL EXTENSION.—A new children's ward, as a Jubilee Memorial, has just been erected as an extension of the Newport Infirmary, and was formally opened by the Mayor on the 17th inst. Accommodation is provided for fifteen beds. All the cots have been presented, and the cost of the first year's maintenance of thirteen out of the fifteen has been provided. The total cost of the building and furnishing is £1500. Improvements in the infirmary have also been effected at an outlay of £1000.

Obituary.

SAMUEL ELLIOTT HOSKINS, F.R.S., F.R.C.P., &c.

WE regret to record the death, in his ninetieth year, of Samuel Elliott Hoskins, of Guernsey. After a short experience of preparation work for the Bar, Mr. Hoskins commenced study for the medical profession in 1818 at the united hospitals of Guy's and St. Thomas's. He obtained the licence of the Society of Apothecaries in 1821, became a Member of the Royal College of Surgeons in 1822, a Licentiate of the Royal College of Physicians of London in 1834, and a Fellow of that body in 1859. After a short period of study in Paris, Mr. Hoskins returned to Guernsey and devoted the remainder of his long and useful life to the practice of his profession and to scientific and antiquarian research. Soon after his return to the Channel Islands he elaborated a chart of stethoscopic signs and carried out an investigation into the solubility of calculi within the body. The former work was published in London, favourably reviewed in our columns, and rapidly passed into a second edition. The latter occupied many years of his life, and was associated with his translation of Scharling's work on Calculi, which was published in 1841. His results presented to the Royal Society in 1843 gained him his election to the Fellowship. If we exclude a very clever research into the causes of the failure of the percussion caps of the 46th Regiment (the results of which were confirmed by Faraday and approved by the great Duke of Wellington), all Mr. Hoskin's further work was associated with Guernsey. His best-known observations concern the climatology of the island. They were at the time unique, and are still quoted with well-merited respect. His paper on the "Origin and Progress of Cholera and Small-pox in 1849" was written at the request of the Epidemiological Society. His work entitled "Charles II. in the Channel Islands," is well known; his less ambitious papers on "The Carved Oak Chests of the Channel Islands," and on the "Outposts of England," less so." About 1859 Mr. Hoskins retired from active professional life, and passed the remainder of his life in historical research. Loved for his kindness, respected for his integrity, Mr. Hoskins was one of the most widely known men in the Channel Islands, and his death is mourned by all who knew him, and who realised that he had reached the contentment which is great gain. He lived his life, and laid it down with the satisfaction that he had not been born in vain.

Medical News.

UNIVERSITY OF GLASGOW.—The following gentlemen have passed the Third Professional Examination for the degrees of M.B. and C.M., including, in the cases marked with asterisks, the subject of Pathology:—

Robert Hillhouse Adam, M.A.,* J. Grant Andrew,* C. Bannatyne, Thomas Dun Bertram, James Boag,* John Cunningham Bowie, R. Broom, B.Sc.,* John Brown,* J. Richmond Bryce, William Bryce,* Leslie Buchanan,* Wm. Cairns, J. Angus Cameron, John Clarke, Thomas Connell Craig,* John Crawford,* Duncan Davie, Archibald Fairlie, M.A.,* Alex. C. Farquharson,* I. Fletcher, Thomas Forrest, James Alex. Gentle,* J. Gilchrist, W. Groome, Thomas A. Haig, Fredk. Hare, A. Biggam Houstoun,* J. Hudson,* Wm. Hutchinson,* A. Jaffray Hutchison, M.A., C. Fdk. Laing, J. T. Brown Laverick, T. Brough Law, J. Lloyd, J. Livingstone Loudon,* Thomas Dryden Moffat, Andrew Moyes, Wm. R. Muir,* Wm. Murray,* A. M'Call,* R. C. Macdiarmid,* G. Godfrey Macdonald,* J. Macdonald, Dugald Macdougall, Patrick Fraser Macgregor, John M'Kie,* R. M'Lay,* R. Alex. M'Lay,* J. A. Macpherson, C. Nicol Macquarie, R. Alex. Paton, A. A. Pratt, Alex. Prentice,* Ferdinand Rees,* Oswald Rees,* Andrew Robertson, W. J Robertson, M.A., Douglas Wills Russell,* Robert Steel, M.A.,* Paul Stewart, John Cockburn Syson,* Andrew Stewart Tindal,* Alex. Watt,* Adam Crawford White,* John Wotherspoon.*

THE new children's ward of the Newport Infirmary was formally opened on the 16th inst. It has been erected at a cost of about £1500.

ON the 19th inst. two new wards were opened at the St. Helen's Providence Free Hospital, the cost of the addition being about £2000. The hospital, which, prior to the enlargement, would accommodate twenty-four patients only, will now accommodate eighty-four.

MEASLES IN THE POTTERIES.—An outbreak of measles of a severe kind is reported from the Potteries. The epidemic appears to be of a more than usually fatal type.

A PUBLIC mortuary and coroner's court have just been erected for the parish of Marylebone by the vestry in the disused burial ground, now a public garden, in Paddington.

MEDICAL MAGISTRATES.—The names of Mr. Thos. H. Gibson, M.B., C.M. Edin., and Mr. R. Wilson Gibson, M.B., C.M. Edin., both of Orton, have been placed on the Commission of the Peace for Westmoreland.

THE LANCASHIRE MEDICAL MISSIONARY.—Dr. Fenn, sent out by the Society of Friends' Foreign Mission Association, has settled at Antananarivo, and it is stated that the new hospital there will soon be completed.

FOOTBALL CASUALTIES.—Whilst playing football, on the 10th inst., in the Haileybury College grounds, Hertford, Frank Whitbread broke his left collar-bone; and in a match played at Durham on Saturday last, between two teams of the Durham City and the Gosforth Football Clubs, a young man named Wilson seriously injured his leg and was carried off the field.

A GIFT TO LANGHOLM, N.B.—At a meeting of the inhabitants, held at the Town Hall, Langholm, on the 6th inst., it was announced that Mr. Hope of New York had resolved to found an institute in Langholm (his native place) for the care and relief of sick or infirm persons being natives or residents in the town or neighbourhood. It is to be named the Thomas Hope Hospital.

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.—The autumn general meeting of this Association will take place at 30, Sackville-street, London, W., on Wednesday, Oct. 31st, at 5 P.M. The members and their friends will afterwards dine at the Hôtel Victoria, Northumberland-avenue, Professor Macalister, F.R.S., President, in the chair. Tickets are obtainable from Dr. Abraham (Hon. Metropol. Sec.), 11, Nottingham-place, London, W.

ROYAL SOUTHERN HOSPITAL, LIVERPOOL.—The committee of this institution have found it necessary to increase the accommodation for administrative purposes, and are taking steps to provide it. It is proposed to erect outside the present building, and on land adjoining the hospital, a mortuary and post-mortem examination room, and also a nurses' house with dormitories for the nursing staff apart from the wards, and a home when off duty for the private nurses of the institution affiliated to the hospital. The estimated outlay for the land and buildings is about £7000, of which £2527 has been subscribed.

BEQUESTS AND DONATIONS TO HOSPITALS.—Mr. Alfred Backhouse, late of Pilmore Hall, Darlington, has bequeathed £1000 to the Darlington Hospital.—Mr. Edward Dickinson, late of Nottingham, has left by his will £1000 to the Nottingham General Hospital, and £500 each to the Nottingham General Dispensary and Nottingham Blind Asylum.—The governors of St. Peter's Hospital, London, have received from the executors of the late Miss Louisa MacKellar £250. The executors of the same lady have forwarded to the secretary of the Great Northern Central Hospital, Holloway-road, London, £1000.

PRESENTATIONS.—Dr. James Adams, M.D., F.R.C.S., has been presented, on his leaving Ashburton, with an address from the subscribers to the Ashburton and Buckfastleigh Cottage Hospital, expressing their regret on losing the valuable services which for fourteen years he has rendered to the Institution.——Dr. J. A. Mackenzie has been presented by the Farnworth Branch of the St. John Ambulance Association with a writing desk, as a slight token of their appreciation of his services. In addition to the public class, Dr. J. A. Mackenzie has trained a bearer company in connexion with the 1st Volunteer Battalion of the Manchester Regiment. All the members of his Volunteer class were reported qualified. He was presented at the conclusion of the course with a handsome silver-mounted walking cane subscribed for by the men. This was in January last. In April last twenty-six policemen belonging to the Farnworth Division of the Lancashire County Constabulary obtained certificates in first aid after a course of instruction from Dr. Mackenzie. The constables showed their appreciation of his services by presenting him with a gold albert chain and pendent.——On the 12th inst., Dr. E. Percival Cockey was presented with a very handsome writing table by the past and present resident medical officers of St. Mary's Hospital as a token of their esteem and friendship on his retirement from the post of medical superintendent of that institution.——At the last monthly meeting of the Wentworth Lodge of Freemasons, No. 1239, Bro. Dr. W. R. Thomas, who has lately removed from Sheffield to Bournemouth, was presented with a massive silver loving cup, subscribed for by a large number of brethren, whose names were inscribed on a beautifully illuminated address.——Mr. A. R. Anderson, F.R.C.S. Eng., had presented to him on Monday last at the General Hospital, Nottingham, by the resident staff and numerous other friends, a walnut library table and chair, a dining-room clock, and a brass newspaper stand, on his resigning the post of senior resident medical officer.

COLLEGE OF PHYSICIANS IN IRELAND.—The following office-bearers have been elected for the ensuing year:—President: Lombe Atthill. Vice-President: A. Foot. Censors: A. Foot, Andrew Horne, C. Nixon, and Joseph M. Redmond. Additional Examiners: E. McD. Cosgrave, S. Myles MacSwiney, and G. F. Duffey. Examiners in Midwifery: J. R. Kirkpatrick and William J. Smyly. Examiners under the Conjoint Scheme: Chemistry and Physics: Isaac Ashe and Walter G. Smith. Materia Medica and Pharmacy: G. F. Duffey and Francis Quinlan. Physiology: J. M. Purser. Medicine: A. Foot, J. Magee Finny, J. H. Benson, and C. Nixon. Midwifery: Andrew Horne. Hygiene and Forensic Medicine: Stephen M. MacSwiney and Joseph Redmond. Examiners for the Membership: A. Foot, George F. Duffey, Stephen M. MacSwiney, J. M. Purser, F. Quinlan, and C. Nixon. Examiners for the Diploma in State Medicine: Chemistry: Walter Smith. Climatology, Meteorology, and the Geographical Distribution of Disease: J. W. Moore. Vital Statistics: S. M. MacSwiney. Hygiene: C. Nixon. Medical Jurisprudence and Pathological Anatomy: G. F. Duffey. Treasurer: A. Smith. Registrar: J. W. Moore. Representative on the General Medical Council: A. Smith.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THIRD OR FINAL EXAMINATION.

PRINCIPLES AND PRACTICE OF MEDICINE.

October 9th, 1888, from 3 to 6 P.M.

Candidates must answer at least four of the six questions. Candidates unable to answer four questions must report the fact to the presiding examiner. The candidate should confine his answers to the points asked in each question, and deal with them in the order indicated.

1. Give the anatomical relations of the abdominal aorta in its whole extent. How would you differentiate an aneurism of this vessel from other abdominal tumours? 2. What is the pathology of pulmonary apoplexy? On what diseases does it follow, and what are its most usual consequences? 3. What are the symptoms of ulcerative endocarditis, and the morbid appearances found after death? For what other diseases is it liable to be mistaken? 4. Discuss briefly the diagnosis of a case of ordinary phthisis in its earliest stage. What are the physical signs most commonly met with at this period of the disease? 5. Describe the characters of a case of facial erysipelas. What local and constitutional treatment would you adopt? 6. Describe the symptoms and treatment of paralysis agitans. Give the differential diagnosis between the symptoms of this disease and disseminated sclerosis.

Note.—This paper also applies to candidates for the Licence of the Royal College of Physicians of London.

MIDWIFERY AND DISEASES OF WOMEN.

October 10th, 1888, from 3 to 6 P.M.

Candidates must answer at least four questions. Candidates unable to answer four questions must report the fact to the presiding examiner, and are not allowed to proceed with their examination.

1. Describe the changes in the ovary which precede, accompany, and follow normal menstruation. 2. Give the signs, differential diagnosis, and treatment of hydramnios. 3. What are the causes of uterine inertia in the second stage of labour? How would you recognise the condition? On what principles would you treat the patient? 4. Describe the causes and treatment of pruritus vulvæ. 5. State the causes which may require the dilatation of the unimpregnated uterus, and describe how it should be done. 6. A woman at the close of the eighth month of pregnancy is taken in labour, and after the pains have continued regularly some hours, the membranes rupture. On being sent for, you find the pelvis blocked by a large hard mass, and, on introducing the finger with difficulty up to the brim, you feel the head of the child, which is unable to enter the pelvis. Write a commentary on this

case, especially referring to the probable nature of the mass felt, and the treatment of the case.

Note.—This paper also applies to candidates for the Licence of the Royal College of Physicians of London.

EXAMINATION ON SURGICAL ANATOMY AND THE PRINCIPLES AND PRACTICE OF SURGERY.

October 12th, 1888, from 1.30 to 4.30 P.M.

Candidates must answer at least four (including one of the first two) of the six questions, and are strongly advised to answer all six questions. Candidates unable to answer four questions must report the fact to the presiding examiner, and are not allowed to proceed with their examination.

1. Mention the situation of the various groups of lymphatic glands found in the pelvis and lower extremity; and state the sources from which they receive lymphatic vessels. 2. Mention the relative positions of the several structures in immediate relation with the shoulder joint; and describe the operation of excision of the head of the humerus. 3. Describe the symptoms and the structural changes of carbuncle in the different stages of the disease. Give the treatment, local and general, which you would adopt. 4. Describe the after-treatment of a case of tracheotomy. Mention the complications which may arise, and how you would meet them. 5. Describe the constitutional and local effects which may follow severe burns, and give their appropriate treatment. 6. What fluid swellings may present themselves in the popliteal space? Give their differential diagnosis and state briefly the treatment appropriate in each.

Note.—This paper applies also to candidates for the Pass Examination for the Diploma of Member of the Royal College of Surgeons of England.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BLACK, GEORGE, M.R.C.S., L.S.A., has been appointed House Surgeon to Guy's Hospital.

BOURNS, N. WHITELAW, M.D. Brux., L.R.C.P. Ed., M.R.C.S., has been appointed Administrator of Anæsthetics to the Westminster Hospital.

BOX, M. H., M.R.C.S., L.S.A., has been appointed Medical Officer for the Churchill District, Axbridge Union.

CARNALL, EDWARD, M.R.C.S., L.S.A. Lond., has been appointed Resident Medical Officer to the Westminster General Dispensary.

CARTER, ROBERT J., M.R.C.S., L.S.A., has been appointed Resident Medical Officer to the Royal Hospital for Children and Women, Waterloo-bridge-road, S.E.

COLMAN, WALTER STACY, M.B.Lond., M.R.C.S., has been appointed Senior House Physician to the National Hospital for the Paralysed and Epileptic, vice Dr. Walter Hull, resigned.

CROWTHER, T., M.D. Aber., M.R.C.S., L.S.A. Lond., has been reappointed Medical Officer for the Luddenden District, Halifax Union.

GARDNER, ERNEST FREDK., M.R.C.S., L.R.C.P., has been appointed House Surgeon to Guy's Hospital.

GARDNER, FRANK GOWER, M.R.C.S., L.S.A., has been appointed House Surgeon to the Stourbridge Dispensary, vice C. Daly, M.D., resigned.

GRIFFITH, T. WARDROP, M.D. Aberd., Professor of Anatomy, Yorkshire College, has been appointed Honorary Physician to the Leeds Public Dispensary.

HARRISON, EDWARD, M.A., M.B., F.R.C.S., has been appointed Medical Officer to the Humber Industrial School-ship *Southampton*.

HARRISON, JAMES, M.B. Edin. and C.M., has been appointed House Surgeon to the Tynemouth Infirmary and Dispensary.

HEBB, RICHARD GRAINGER, M.A., M.D. Cantab., has been appointed an Assistant Physician to the Westminster Hospital.

JONES, M. D., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer of Health for Ruthin Rural District.

LEDWARD, M. P., M.R.C.S., L.S.A., has been appointed Junior Assistant Medical Officer to the Salop and Montgomery Counties Asylum, Bicton Heath, Shrewsbury.

LLOYD, JAMES H., M.R.C.S., L.R.C.P., & L.M. Ed., has been appointed Medical Officer to the Kenlisbeare District of the Tiverton Union, vice R. Bryden, M.R.C.S., resigned.

O'NEILL, J. GOWER, has been appointed Medical Officer and Public Vaccinator for the Elston and Caunton Districts of the Southwell Union, vice T. F. Greenwood, resigned.

PENNELL, GEORGE HERBERT, M.R.C.S., L.R.C.P., has been appointed House Physician to Guy's Hospital.

POCKLEY, F. ANTILL, M.B., C.M. Edin., M.R.C.S., has been appointed Lecturer in Ophthalmic Medicine and Surgery for the University of Sydney.

RIGDEN, ALAN, L.R.C.P. Lond., M.R.C.S., has been appointed Senior Assistant Medical Officer, Salop and Montgomery Counties Asylum, Bicton-heath, Shrewsbury, vice Denning, resigned.

ROBERTS, JOHN LLOYD, M.R.C.S., L.R.C.P., has been appointed House Physician to Guy's Hospital.

RUSSELL, J. S., RISIEN, M.B., M.S. Edin., has been appointed Junior House Physician to the National Hospital for the Paralysed and Epileptic, vice Dr. R. T. Williamson, resigned.

SAVERY, FRANK, M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to the Royal Infirmary, Hull.

SHELMERDINE, H., M.B. Edin. and C.M., has been appointed Medical Officer for the Waterbeach District, Chesterton Union.

VINRACE, J. H., M.B. Lond., M.R.C.P. Lond., M.R.C.S., has been appointed an Assistant Physician to St. John's Hospital for Diseases of the Skin, vice Morgan Dockrell, M.A., M.D., B.Ch., elected a Physician.

WATSON, JOHN, M.B. Durh., L.R.C.P. Lond., &c., has been appointed Senior Assistant House Surgeon to the Royal Infirmary, Hull, vice F. Savery, M.R.C.S., promoted.

WILSON, R. A., M.B., C.M. Edin., has been appointed Assistant Medical Officer of the Rubery Hill Asylum, near Bromsgrove, vice J. Cuthbert, L.R.C.S., resigned.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BOOTLE BOROUGH HOSPITAL.—House Surgeon. Salary £80 per annum with board and residence in the Hospital.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Three Clinical Assistants. The fee is £5 5s. for three months.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—Assistant Physician.

FEMALE LOCK HOSPITAL, Harrow-road, London, W.—Assistant House Surgeon. No salary, but board and lodging.

HOSPITAL FOR WOMEN, Soho-square, London.—Clinical Assistants in the out-patient department in November. Fee for course of three months, £5 5s.

LEEDS FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Surgeon, married, for Bischoff House Surgery of this Association. Salary £200 per annum. Cleaning and travelling allowances £65, and all Midwifery fees. Residence, coals and gas, provided, drugs supplied, and rates paid.

MEDICAL INSTITUTE OF ANCIENT ORDER OF SHEPHERDS, Bristol.—Medical Officer. Salary £140, and unfurnished residence.

PARISH OF LAMBETH.—Two District Medical Officers. The salary for each appointment will be £100 per annum, with extra fees as specified in the Orders of the Poor-law Board and Local Government Board.

ST. MARK'S HOSPITAL FOR FISTULA, &c., City-road, London, E.C.—Honorary Surgeon. Also Honorary Assistant Surgeon.

WILTS COUNTY ASYLUM.—Second Assistant Medical Officer. Salary £100 per annum, with board, residence, attendance, and washing.

WIRRAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN.—Honorary Medical Officer.

Births, Marriages, and Deaths.

BIRTHS.

CAHILL.—On the 17th inst., at Seville-street, Lowndes-square, S.W., the wife of John Cahill, F.R.C.S., of a daughter.

CALEB.—On the 2nd inst., at Abbotsford, Lahore, Punjab, the wife of C. C. Caleb, Esq., M.B., M.S., Professor of Physiology in the Medical College, Lahore, of a daughter.

HARDWICK.—On the 21st inst., at Ferncliffe Villas, Newquay, Cornwall, the wife of Arthur Hardwick, M.B., L.S.A., of a son.

MACNAMARA.—On the 12th inst., at the Royal Naval Hospital, Malta, Mrs. Hugh Macnamara, of a son.

SOUTAR.—On the 11th inst., at Barnwood, near Gloucester, the wife of James Greig Soutar, M.B., of a son.

TWEEDY.—On the 22nd inst., at Gardiner's-row, Rutland-square, Dublin, the wife of H. C. Tweedy, M.D., of a son.

UPTON.—On the 22nd inst., at Medina-villas, West Brighton, the wife of Herbert Chrippes Upton, L.R.C.P., of a son.

MARRIAGES.

ACKLAND—KENSINGTON.—On the 18th inst., at the Church of All Saints, East Budleigh, Devon, by the Rev. William Frederick Green, M.A., Vicar of the Parish, assisted by the Rev. Charles Rees Price, M.A., of Budleigh Salterton, John McKno Ackland, M.R.C.S. Eng., &c., of 24, Southernhay, Exeter, to Ida, younger daughter of Edward Thomas Kensington, Esq., of Westbourne, Budleigh Salterton, Devon.

ENGLAND—ATKINSON.—On the 17th inst., at All Saints', Moulton, Geo. F. England, L.R.C.P. Lond., &c., to Eliza, younger daughter of Wilson Atkinson, of Moulton.

JOHNSON—KENT.—On the 3rd inst., at Hallstatt, Upper Austria, Frederick Miller Johnson, M.D., C.M. Edin., to Eveline Annie, daughter of the late Samuel Saville Kent.

MACLAREN—LOWE.—On the 18th inst., at Isla Mount, Coupar Angus, by the Rev. F. R. MacDonald, Parish Minister, Surgeon-Major George Gilbert MacLaren, M.D., Indian Medical Service, to Cecilia Anne, fourth daughter of John Lowe, Solicitor.

PECHELL—BRIGGS.—On the 24th ult., at St. Mark's Church, Bangalore, India, Augustus A. Pechell, M.B., A.M.S., third son of Sir G. Brooke Pechell, Bart., Alton, Hants, to Mabel, youngest daughter of the late Colonel Briggs, Madras Staff Corps.

DEATHS.

DAVIS.—On the 9th inst., at Wreckington House, Gateshead, Robert Davis, M.R.C.S., L.S.A., aged 64.

FOX.—On the 21st inst., at Welland House, New Barnet, Herts, Ellenor, wife of William A. Fox, L.R.C.S.E.

GRIFFITH.—On the 14th inst., at Aix-les-Bains, Griffith Griffith, M.D., of Hyères.

MULLAR.—On the 19th inst., at Oxford-road, Kilburn, London, F. G. William Mullar, M.D., M.R.C.S., L.S.A. Edin., son of the late Arthur Mullar, of Fanton, Brittany, and Edinburgh, aged 66.

RAYNES.—On the 18th inst., at Potton, Bedfordshire, Henry Raynes, M.R.C.S., L.S.A., in his 81st year.

WILLIAMS.—On the 19th inst., at The Elms, Wheatley, Oxon., Leonard Williams, B.A., M.B. Cambridge, aged 42.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths

Medical Diary for the ensuing Week.

Monday, October 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. J. H. Morgan: Case of Large Hairy Mole on the Back of Frontal Meningocele.—Dr. J. D. Savill: (1) Case of Tetanus cured by Chloral Hydrate; (2) Section of Median Nerve followed by Lesions of Muscle and Skin.—Mr. W. J. Walsham: Peculiar Abnormalities of the Clavicles in a Boy the subject of Rickets and Lateral Curvature of the Spine.—Mr. Bernard Pitts: Some cases of Partial Arthrectomy of the Elbow-joint.—Mr. Colcott Fox: Congenital Rupture of the Sterno-mastoid.—Cases by Dr. Beevor, Mr. Marmaduke Sheild, and others.

Tuesday, October 30.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.
THE PARKES MUSEUM (74A, Margaret-street, Regent-street, W.).—8 P.M. Dr. Charles Kelly: Sanitary Law—General Enactments, Public Health Act, 1875, Model Bye-laws.

Wednesday, October 31.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

Thursday, November 1.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Arthrectomy *versus* Excision of Knee. The following gentlemen will also show cases and take part in the discussion:—Messrs. John H. Morgan, E. Owen, C. B. Keetley, Walter Pye, A. M. Sheild, Arthur Barker, B. Wainewright, and Clutton. Council at 8 P.M.

Friday, November 2.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
THE PARKES MUSEUM (74A, Margaret-street, Regent-street, W.).—8 P.M. Mr. A. Wynter Blyth: Sanitary Laws and Regulations Governing the Metropolis.
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Specimens to be shown:—Dr. Drewitt: Thoracic Aneurysm.—Mr. Lloyd: Uterine Tumours.—Dr. Coombie: Abdominal Aneurysm.—Mr. Dunn: Pathological Specimens.—Dr. Abraham: Microscopic Sections, Neoplasms of Skin. Clinical Cases:—Mr. Keetley: (1) Case of Ligature of Femoral for Popliteal Aneurysm; (2) Ligature of Common Femoral for Femoral Aneurysm. Papers:—Mr. Keetley: Cases of Abdominal Section for Suppurative Peritonitis.—Mr. Ballance: The Treatment of Popliteal Aneurysm.

Saturday, November 3.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 25th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Oct. 19	30·29	S.E.	45	44	81	56	41	..	Foggy
,, 20	30·37	S.E.	43	41	80	55	40	..	Hazy
,, 21	30·42	E.	43	41	82	56	36	..	Foggy
,, 22	30·47	W.	47	45	66	53	42	..	Foggy
,, 23	30·33	S.W.	40	39	60	51	35	..	Foggy
,, 24	30·15	S.W.	38	38	62	54	37	..	Foggy
,, 25	30·00	S.W.	53	51	81	62	38	..	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
All communications relating to the editorial business of the journal must be addressed "To the Editors."
Lectures, original articles, and reports should be written on one side only of the paper.
Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
We cannot prescribe or recommend practitioners.
Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*
We cannot undertake to return MSS. not used.

AN ASPIRING CHEMIST.

F. H. K., M.R.C.S.—We think with our correspondent that for a chemist to propose to a medical man to work with him, the latter to be dependent on a small share of the profits, and to continue such work till the chemist has got through his preliminary examinations and all the ulterior steps of his medical education, and then to be absorbed into a partnership with the chemist, is a fine instance of audacity. The letter is at once a caution and a study, and we append it. It lets us see, too, into the profits of a chemist's business—even when he is kind enough not to visit.

"——, ——, Oct. 9th, 1888.

"DEAR SIR,—I shall be pleased to see you at the —— Hotel, ——, on Thursday, between 12 and 4. I have a drug business at the above address, and for the past three months have had a medical man living with me and working up a practice, my prescribing having become too onerous. He leaves me owing to family reasons. There is no question of covering, as I do not visit. The terms offered are that I retain three-fifths of the net profit under £500, with a proviso that the medical man receives at least £150 per annum. Of the profit over £500 I retain half. I intend going up in December for the Medical Prelim., and propose going backwards and forwards to hospital every week after the practice is thoroughly established. In the event of my passing, we should enter into a regular partnership on equal shares. The takings for September of the practice average £600 a year, in spite of the fact of its being harvest time and a very healthy period. I expect during the winter months to average over £70 a month, and there is scope for great increase. Kindly write me to the ——, stating if I may expect you there, and oblige,

"Yours truly,

"——— ———."

Dr. Hammond.—The regulations would most probably have to be complied with.

M. A. C. should consult her medical attendant on the matter.

METHOD OF APPLYING HOT MOIST FOMENTATIONS.

To the Editors of THE LANCET.

SIRS,—I am indebted to the ingenuity of a lady patient for the following simple but effective mode of applying hot moist fomentations. She puts a square yard of flannel into one of the patent potato squeezers, pours boiling water upon it, and squeezes it; and this is done so effectually that the bedclothes &c. are not made wet and uncomfortable by the application of the flannel, as they are when it is simply wrung out by the hands. I thought it worth recording for the benefit of my medical friends.

I am, Sirs, yours faithfully,

Harrogate, Oct. 20th, 1888. THOS. BRITTON, M.D.

"SHIP SURGEONS."

To the Editors of THE LANCET.

SIRS,—A correspondent points out in your last issue (page 799) that some of the steamship companies are obtaining surgeons on their vessels for nothing. Certainly; and why not? If your correspondent took the trouble to make a tour of the shipping offices in search of a berth as doctor, he would see for himself that any number of men are offering their services in return for a voyage out and home, and an applicant may consider himself very fortunate if he succeeds in getting a berth even on these terms. If shipping companies or owners have twenty applicants for each ship they send out, they can hardly be blamed for saving the £10 a month. Dividends stand before doctors. Many shipping people have often told me they regard carrying a surgeon merely a legal form; and it is only a question of a very short time when passage instead of pay will be the general rule, except perhaps in such lines as the P. & O., who maintain a regular staff for their fleet. The public know well enough the state of the profession. They see the fierce competition to give services for nothing; they see London swarming with sixpenny dispensaries; they see the head doctors, as they call it, giving advice for nothing at the hospitals; and in the country clubs and benefit societies of every description getting work for pay that a Chinese would blush to receive. The score of examining bodies are flooding the country with medical men, and if they could turn out ready-made doctors at the rate of a thousand a day, they would. With them it is only a question of £ *s. d.* Now, if these money-making institutions were swept away, and one respectable portal only existed through which to enter the profession, we should soon see a change in all ways for the better, and working for nothing on sea or land would be a thing of the past.

I am, Sirs, yours very faithfully,

Oct. 22nd, 1888. TRUTH.

Mr. J. Marshall.—Teddington lies wholly on the gravel and sand bed of the Thames Valley; Twickenham stands on the same formation, but there is a patch of brick earth at Strawberry-hill; the north-western part of Richmond lies on the same formation, the remainder on London clay; Mortlake, Kew, and part of Gunnersbury are also on gravel and sand, whilst the northern part of Gunnersbury is on brick earth. The boundaries of these formations will be seen from the Drift Geological Map of London and its Environs, issued by the Geological Survey of England. It can be obtained at Messrs. Stanford's of Charing-cross.

S. S.—Specimen copies of the questions set at the examination in psychological medicine are to be found in the recent numbers of the Journal of Mental Science.

F. T. C. D. is referred to a report of the meeting in our present issue.

OBSCENE POSTERS.

To the Editors of THE LANCET.

SIRS,—In reply to the letter of "Medicus" in your issue of Oct. 13th, allow me to say that this Society is doing what it can in the matter, and that I shall be glad to communicate with any of your readers who will co-operate. The law is at present inadequate except in certain places, where, as at Sheffield, a local Act has effectually extirpated the abomination. Your readers will do well to exert their influence to introduce similar Acts throughout the country, and in support of a Bill to the same effect which has been drafted, and will, we hope, be brought before Parliament next session.

The obscene poster is, however, only one form of quack advertisement, and it will be of little use to scotch this snake unless we are prepared to deal with the bold announcements of self-styled "eminent medical electricians" and the like, which appear regularly in many of the most respectable newspapers and magazines. Some of these advertisements cover wholesale imposture professing to claim genuine medical guarantees, and are mischievous in proportion to their seeming harmlessness and plausibility. While these remain unchallenged by the medical profession, we can do little to check the extortionate trade upon the nervous apprehensions of a deluded public.

I am, Sirs, yours faithfully,

HERBERT EVERITT, Lieut.-Col.,
Secretary, Church of England Purity Society.

Bridge-street, S.W., Oct. 15th, 1888.

JEFFRIES AND HILLS FUND.

To the Editors of THE LANCET.

SIRS,—The following additional sums have been received since the publication of the last list. There is still a balance of about £60 to collect.

I am, Sirs, your obedient servant,

C. B. KEETLEY.

10, George-street, Hanover-square, W., Oct. 18th, 1888.

Ed. Hy. Cardwell	..	£5	0	0	E. (Sheffield)	£0	10	0
G. Granville Bantock	..	2	2	0	Ed. O'Ryan	0	10	0
Geo. A. Rae	..	1	1	0	Alfred C. E. Harris	0	10	0
Arthur Roberts	..	1	0	0	L. A. B.	0	5	0
C. G. Woodd	..	0	15	0	Ed. Knight	0	5	0
Henry Stear	..	0	10	0				

Mr. Ford (Ealing) is thanked for his communication. Sodic chloride has been, *inter alia*, frequently employed as a solvent of diphtheritic membrane.

OBSERVATIONS BY A SHIP SURGEON.

To the Editors of THE LANCET.

SIRS,—The resources of a ship's medicine chest are usually limited. Perhaps some of your readers may be interested in the following observations made during three years at sea in all climates.

In cystitis in children, powdered cubebs made into confection with jelly or honey, half a teaspoonful frequently, with frequent drinks of weak lime juice, promotes a speedy cure. No washing out is necessary. A mustard leaf over the pubes is valuable. In all cases of cuticular inflammation, no remedy is superior to resin ointment. In erysipelas, burns and scalds, eczema, &c., it is invaluable, but it must be applied thickly on lint, and if properly used no ointment excludes air so effectually. I prefer it to white paint, and so do the patients. The point is to plaster it on freely. In gonorrhœa the best injection is a weak solution of permanganate of potash, with a little glycerine added. If the lotion produces the least pain, it must be further diluted. In pruritus ani and inflamed piles, a morphia suppository, one-sixth of a grain, gave instant relief where ointments and lotions failed. In hot climates, the itching produced by sweat and chafing is sometimes intolerable. The internal administration of morphia often produces paralysis of the bladder. Some patients are more affected than others. I have often remarked the inability to void urine which accompanies the use of morphia. Chlorodyne does not, however, produce this symptom. Carbolic glycerine is very valuable; its affinity for water, abstracting serum from the blood, the elasticity and consequent removal of tension which it imparts to swollen cuticle, together with its antiseptic action, rank it first among ordinary dressings. In hay fever and influenza stuff the nostrils with lint soaked in carbolic glycerine, and the pain, sneezing, and swelling disappear, and the inflammation does not extend down the air passages. As a local application (diluted) to the gums after tooth extraction, or in any similar case, no dressing will be found so soothing. In chronic dysentery try from five to ten minims of chlorodyne, from twenty to thirty minims of tincture of catechu, from ten to twenty minims of castor oil, olive oil to half an ounce; mix and repeat frequently. This has succeeded where ipecacuan and freshly prepared bael fruit failed. The mixture must be well shaken. In bleeding piles a rhubarb pill every morning after breakfast will give relief.

These remarks are only intended to show what can be done with an ordinary medicine chest, as I have often heard ship surgeons complain that their stock of drugs was too limited. Ergot, resin ointment, carbolic glycerine, morphia, and liquor arsenicalis should find a place in every chest.

I am, Sirs, yours faithfully,

Birkenhead, Oct. 23rd, 1888. C. F. NAISMITH, L.R.C.P.E.

J. C. D.—It is generally held that the examination for the diploma in Public Health granted by the University of Cambridge and by the Conjoint Board in London cover the same ground and are much alike as regards severity. The Colleges of Physicians and Surgeons never issue any list of books for any of their examinations, leaving to candidates to judge, from the syllabus of subjects and from previous papers, what works to study. Cambridge University issues at its depôt in Paternoster-row, E.C., a list of the questions given at the last examination, and appended to this is a list of books recommended for study. As new works have been issued, the list has become so long as to be bewildering, and candidates for either examination must select one or more out of the many books named in each subject. Candidates are especially expected to be acquainted with the most recent researches in sanitary medicine, and these are largely embodied in the reports of the Medical Officer of the Local Government Board. The examination at Cambridge is held in October; that in London in June and December.

Quæstio Vexata.—The description of the circumstances of the dispute is too vague to warrant the expression of an opinion on our part.

COMBINATION.

To the Editors of THE LANCET.

SIRS,—Week after week the cry of the long-suffering general practitioner ascends in your columns. Abuses are exposed and reforms suggested *ad infinitum*, but nothing practical is done. The hearts of those who respect and honour their profession grow sick with long-deferred hope. Will not someone who commands the respect and confidence of the profession take the lead in this matter? As a beginning, let means be taken to carry out the first of the four suggestions of your correspondent, "J. H. T.," in your last issue (p. 724)—namely, "that every member of the profession be canvassed as to the desirability of forming an association for the protection of the profession." Let us concentrate our attention on this one thing only; for having once secured combination, the rest will soon follow. Our wants are reasonable, the power is in our own hands, and we have but to ask with a sufficiently united voice to obtain what we want.

I am, Sirs, your obedient servant,

Oct. 14th, 1888. ALPHA.

Perplexed.—A medical student has no legal standing as a medical practitioner. He cannot recover for attendance, sign vaccination certificates, &c. But in the case supposed the Medical Council has no jurisdiction. It has to do with registered practitioners only.

CIGARETTES.

To the Editors of THE LANCET.

SIRS,—When on the Continent I noticed that there had been a discussion relating to the effect of cigarette smoking upon the throat. With the assistance of Mr. Chambers, the greatest authority on tobacco in London, I have made a study of the tobacco grown in different parts of the world; and it is well known that tobaccos, almost more than theobroma cocoa and other plants, depend for their flavour entirely on the soil. Setting aside the question of the action of burnt paper upon the throat, it is recognised that one of the varieties of tobacco that comes from Smyrna is used as a mixing tobacco because of its creating a tickling sensation in the throat, seeing that it has strength and a good flavour at the same time; but it is only those who are accustomed to live near where this tobacco is grown who can support it when smoked in a pure state. I make no doubt that the manufacturers of tobacco, finding that this was useful on account of its flavour, have put a certain quantity into the cigarettes that have come to this country. I need hardly refer to the immense difference there is between the manner of smoking tobacco in this country, as a rule, compared with the native manner of always inhaling it. In my experience, the Malays can inhale the strongest tobacco, and even the cross-breds between Chinese and Malays come next. In China a native invariably pitches upon the quality or strength of his tobacco according to the powers of his throat to endure the sensation of the smoke passing down into his lungs without making him cough.

I am, Sirs, yours truly,

Oct. 18th, 1888. THOS. CHRISTY, F.L.S.

M.B.—Perhaps the best deliverance on the Use of the Ophthalmoscope in Insanity is the paper by Dr. Charles Aldridge in the first volume of the West Riding Asylum Medical Reports. For the condition of the urine in the insane Dr. Blandford's Index to the Journal of Mental Science may be consulted.

Mr. T. Christy.—We should like to examine a specimen of the apparatus.

THE TESTIMONIAL FEVER.

To the Editors of THE LANCET.

SIRS,—We have lately been suffering from a violent attack of the "testimonial fever." From one hospital alone I, in common with many of my friends, have had three consecutive appeals—one for a retiring physician, who has, I am happy to see, got his portrait painted; a second for a surgeon who retired many years ago, and whose portrait seems to "hang fire," since it has found its way into the "agony column" of *The Times;* and, lastly, for a surgeon about to retire. Now, if report speaks truly, two more surgeons of this hospital must shortly retire, and the senior physician cannot hold office many years longer. Are we to be expected to subscribe for all these gentlemen? And, in fact, is it not time that this testimonial humbug was exploded?

I am, Sirs, yours obediently,

October, 1888. A. K. C.

Dr. Bourke (Hanover, Cape Colony).—The subject was discussed in our impression of the 6th inst., page 683.

Mr. Bellamy.—Yes.

ERRATA.—The Bolton Infirmary case reported in our "Mirror" last week was under the care of Dr. Garstang, not of Mr. Kingsford, from whom the report was received.—The rendering by our report last week of the motto of the British Nurses' Association requires amending. It is "Steadfast and true," not "Steady and true."—In Mr. W. G. Spencer's paper read at the Pathological Society on the 16th inst., and an abstract of which was published in our last number, page 769, the proportion of the male population of France who required treatment for varicocele before entrance into the army was given as 32 per 1000: it should have been 3·2 per 1000.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Bellamy, London; Dr. Dickinson, London; Mr. E. C. Parry, London; Dr. T. Oliver, Newcastle-on-Tyne; Mr. St. Clair Buxton, London; Dr. W. O. Mackenzie, London; Mr. Winter, Wolverhampton; Mr. P. Thornton, Canterbury; Dr. McBean, Newcastle-on-Tyne; Dr. G. F. Shiels, New York; Mr. Thos. Williams, London; Mr. Wilkinson, Smallthorne; Mr. T. Christy, London; Mr. Ballance, London; Mr. C. Bell, New York; Mr. Torrance, Newcastle-on-Tyne; Messrs. Burroughs and Wellcome; Surg.-Major Rogers; Dr. Jacobs, Leeds; Messrs. Roberts and Co., London; Mr. Hilcken, London; Dr. Mackenzie; Dr. C. W. Dodd, Wurzburg; Dr. Zwaardemaker, Utrecht; Dr. A. Crombie, Calcutta; Mr. Woolcombe, Plymouth; Dr. Bigg, London; Surgeon V. G. Thorpe, R.N.; Dr. Milligan, Liverpool; Mr. Blackett, London; Mr. J. Lowe, Southport; Mr. Wolseley, Birmingham; Dr. Britton, Harrogate; Dr. Abraham, London; Mr. J. Anderson, London; Mr. Davies, Bristol; Mr. Kingsford, Bolton; Mr. Spicer, London; Messrs. Steele and Ellis, London; Dr. Maclachlan, Dumbarton; Messrs. Wyleys and Co., Coventry; Mr. Cumberbatch, London; Mr. Jebb, London; Mr. J. Johnson, London; Messrs. Colman, London; Dr. J. Murphy, Sunderland; Mr. W. H. C. Davies, London; Dr. Carey, Guernsey; Dr. Gill, Hampstead; Mr. Ackland, Exeter; Dr. Oliver, London; Mr. F. E. Cockell, London; Mr. R. Fletcher, Worcester; Mr. Naismith, Birkenhead; Mr. Keetley, London; Mr. F. Hewitt, London; Mr. J. Collier, Manchester; Mr. Kinglake, Taunton; Dr. Wetherell, Stokesley; McLeod, Calcutta; Janus; J. C. D.; Cantab., London; Hospital Women, London; Lady Superintendent, London; Colonist; Quærens.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Dixon, Northamptom; Mr. Wilson, Leeds; Mr. Terry, London; Mr. Van Praagh, London; Mr. Robertson, Peckham; Messrs. Stent and Son, Guildford; Mr. Lauder, Leeds; Mr. Juler, London; Messrs. Kilner Bros., London; Dr. Taylor, Dublin; Mr. Reeves, Brixton; Mr. Fox, New Barnet; Dr. Bramwell, Goole; Mr. Rich, Hackney; Messrs. Bell and Bradfute, Edinburgh; Mr. Barlow, Birmingham; Mr. Tindall, Market Harborough; Dr. Gant, London; Mr. Hartley, London; Messrs. Douglas and Mason, Edinburgh; Mr. Griffiths, Chester; Messrs. Macfarlan and Co., London; Mr. Brown, Westgate; Mr. Heywood, Manchester; Mr. Trübner, London; Mr. Parsons, Hastings; Mr. Wilson, Liverpool; Miss Williams, London; Mr. Lewis, Birmingham; Mr. Brown, London; Mr. Scarlett, London; Dr. Annington, Cambs; Mr. Houseman, Lancs; Mr. Hardwicke; Mr. Browning, Sheffield; E. D., Sheffield; O. K., Guernsey; C. V., Birmingham; North, Birmingham; Royal Infirmary, Manchester; Senex, London; Insula; Wolverhampton General Hospital; A. D., Scotland; X. Y. Z., Salop; Bradford Eye and Ear Hospital; Delta, Folkestone; Doctor, Exeter; Placebo, Edinburgh; B. H. R., London; A. C., Manchester; Medico, Balham; Medicus, London; Alpha, London; G. V., London; R. S. T., London; L. C., London; Æneas, London; Secretary, London; Sligo, London; T. L., Manchester; Medicus, Brighton; X., London; Chez nous, London; Rex, London; A. T., London; Doctor, London; Bonâfide, London; Medicus, Carnforth; W., Newcastle; M.D., Hammersmith; Medicus, Dublin; T. N. G., London; Larynx, London; Valahaka, London; Bernard, London; H. W. G., Richmond; L. M. N. London.

The Freemason, Fireside News, The Women's Gazette, Denbighshire Free Press, Oldham Daily Standard, North British Daily Mail, Herts Advertiser and St. Albans Times, Herald and Weekly Free Press, Daily Telegraph (Sydney), Hertfordshire Mercury, Scottish Leader, Surrey Advertiser, West Middlesex Advertiser, Otago Daily Times, Reading Mercury, Milwaukee Sentinel, Western Morning News, &c., have been received.

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